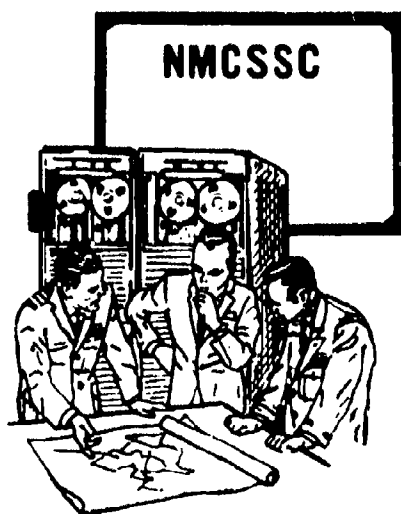


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COMPUTER SYSTEM MANUAL
CSM PSM 9A-67
VOLUME I, PART C
29 FEBRUARY 1972

AD 742784

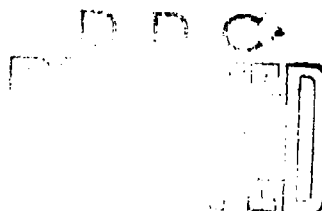
**THE NMCSSC
QUICK-REACTING
GENERAL WAR GAMING
SYSTEM
(QUICK)**

DATA INPUT SUBSYSTEM

Part A - AD742783

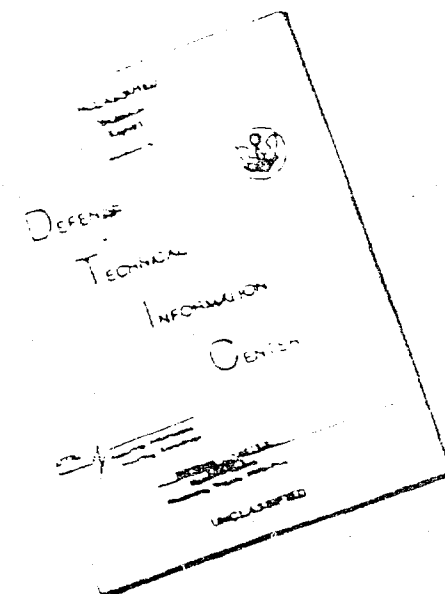
**PROGRAMMING SPECIFICATIONS
MANUAL**

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15. ABSTRACT This is one of three volumes describing the computer programming specifications for the Quick-Reacting General War Gaming System (QUICK). This volume addresses computer programs of the QUICK Data Input Subsystem. It is intended to serve as the basis for program maintenance activities. Accordingly, it describes the program functions and contains flow charts for each program and subprogram of the Data Input Subsystem. Based upon suitable data base and user control parameters, QUICK will generate individual bomber and missile plans suitable for war gaming, and simulate the planned events. The generated plans are of a form suitable for independent review and revision. Subsequently, the planned events are simulated; various statistical summaries are produced to reflect the results of the war game. A variety of force postures and strategies can be accommodated. QUICK is documented extensively in a set of Computer System Manuals (series 9-67) published by the National Military Command System Support Center (NMCSSC), Defense Communications Agency (DCA). The Pentagon, Washington, DC 20301.			

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Computer System Manual Number CSM PSM 9A-67

19 February 1971

THE NMCSSC QUICK-REACTING GENERAL WAR GAMING SYSTEM (QUICK)

Programming Specifications Manual

Volume I - Data Input Subsystem

Part C

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ABSTRACT

The computerized Quick-Reacting General War Gaming System (QUICK) will accept input data, automatically generate global strategic nuclear war plans, simulate the planned events, and provide statistical output summaries. QUICK has been programmed in FORTRAN for use on the NMCSSC CDC 3800 computer system.

The QUICK Programming Specifications Manual (PSM) consists of three volumes: Volume I, Data Input Subsystem; Volume II, Plan Generation Subsystem; Volume III, Simulation and Data Output Subsystems. The Programming Specifications Manual complements the other QUICK Computer System Manuals to facilitate maintenance of the war gaming system. This volume, Volume I, provides the programmer/analyst with a technical description of the purpose, functions, general procedures, and programming techniques applicable to the programs of the Data Input Subsystem and to the utility programs/routines which support the system. This volume is in three parts: Part A provides a description of the programs/subroutines; Parts B and C contain the associated program listings. Companion documents are:

1. GENERAL DESCRIPTION
Computer System Manual CSM GD 9A-67
A nontechnical description for senior management personnel
2. ANALYTICAL MANUAL
Computer System Manual CSM AM 9A-67 (three volumes)
Provides a description of the system methodology for the nonprogrammer analysts
3. USER'S MANUAL
Computer System Manual CSM UM 9-67 (two volumes)
Provides detailed instructions for applications of the system
4. OPERATOR'S MANUAL
Computer System Manual CSM OM 9A-67
Provides instructions and procedures for the computer operators

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```

70 READ LOGNCON
PRINT 123, NCON
CHECK FOR PROPER DATA CARD
IF (NCON(1).EQ.OPTION) GO TO 2
CHECK FOR END OF QUIRBASE RUN
IF (NCON(1).NE. JEND) GO TO 1
PRINT 121
WRITE(44,121)
STOP
1 PRINT 101,NCON
CALL ABORT
CHECK SECOND FIELD OF DATA CARD FOR SELECTED OPTION
2 IF (NCON(2).EQ.DMSETU) GO TO 300
201 IF (NCON(2).EQ.DMUPDATE) GO TO 400
202 IF (NCON(2).EQ.DMQUIKORG) GO TO 500
203 IF (NCON(2).EQ.DMPRINTOR) GO TO 600
IF (NCON(2).EQ. 8) DMPRINTDATA GO TO 600
IF (NCON(2).EQ. 7) DMPRINTUB GO TO 600
PRINT 102,NCON
CALL ABORT
400 IF (NCON(7).NE. 1H) GO TO 401
XN=GETDATE(X)
NCON(7) = NDATE
401 NOUT1=0
NOUT2=0
CHECK TO SEE IF SECOND COPY OF SETIU TAPE REQUESTED
IF (NCON(4).EQ. 6) M4LUP) NOUT2 = 8
NPR=1
CHECK TO SEE IF PRINT IS TURNED OFF
IF (NCON(3).EQ.(MNCPRINT) NPR=2
NPR = 1 PRINT UPDATES
CHECK TO SEE IF PRINT CARDS WILL BE READ
IF (NCON(3).EQ.DMPRINT,TL) NPR=3
NPR=2 MNCPRINT
NPR = 3 = MNCRUAL SELECTION OF PRINTS
MNCPTAP=0
DECODE(4,103,NCON(5)) NMUN
IF (NMUN.NE.4) MTAPE) GO TO 402
CHECK TO SEE IF CARD IMAGE DATA ON TAPE
DECODE(4,113,NCON(5)) N1,N2,N3,N4
IF (N1.LT.2.OR.N4.GT.5) GO TO 403
CHECK FOR LEGAL TAPE NUMBERS
MNCPTAP=MNCPTAP + 1 $ REWIND N1
IF (N2.LT.2.OR.N2.GT.5) GO TO 403
MNCPTAP=MNCPTAP + 1 $ REWIND N2
IF (N3.LT.2.OR.N3.GT.5) GO TO 403
MNCPTAP=MNCPTAP + 1 $ REWIND N3
IF (N4.LT.2.OR.N4.GT.5) GO TO 403
MNCPTAP=MNCPTAP + 1 $ REWIND N4
CHECK TO SEE IF TAPE NUMBERS WERE GIVEN
403 IF (MNCPTAP.LE.0) PRINT 114
402 DECODE (4,113,NCON(6)) NMUN
CHECK TO SEE IF BUFFER DATA WILL BE REQUESTED
IF (NMUN.NE.4) MBOFF) GO TO 404
DECODE(4,113,NCON(6)) M1,M2,M3,M4
MNCPTAP=0

```

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```

C      DO LOOP TO CHECK LOGICAL TAPES REQUESTED FOR BUFFERED TAPE
DC 405 I=1,4
IF (NUT(I),L1,2,OR,NUT(I),G1,5) GO TO 406
MCPTAP=MCPTAP+1
REWIND NUT(I)
405 CONTINUE
406 IF (MCPTAP,LE,0) PRINT 115
CHECK TO SEE IF ANY TAPE NUMBERS GIVEN
404 CONTINUE
INTAPE=1
REWIND INTAPE
PRINT 104, NCON(2), INTAPE, NCON(7)
IF STATEMENTS ARE TO SELECT CORRECT PRINT FORMATS
IF (MCPTAP,EQ,0,AND,MCPTAP,EQ,0) PRINT 116
IF (MCPTAP,GE,1) PRINT 117, (NUT(I),I=1,MCPTAP)
IF (MCPTAP,GE,1) PRINT 118, (NUT(I),I=1,MCPTAP)
IF (NCUT2,GT,0) PRINT 105,NCUT1,NCUT2
IF (NCUT2,LE,0) PRINT 106,NCUT1
IF (NPR,EQ,1) PRINT 119
IF (NPR,EQ,2) PRINT 109
IF (NPR,EQ,3) PRINT 120
PRINT 107
NUSED = NUSED + 1
NCPUSUD(NUSED) = 8MUPUATE
CALL FASTSET
GO TO 70
3 CONTINUE
PRINT 102,NCON
CALL ABCHT
300 DCCODE( 4, 103, NCON(3)) NNUN
INTAPE = 60
C      INPUT TO BOOTSTRAP ON CARDS OR ON TAPE 10
IF ( NNUN ,EQ, INTAPE ) INTAPE = 10
NNH = 1
CHECK TO SEE IF PRINT IS TURNED OFF
IF ( NCON(4) ,EQ, 8MNOHPINT ) NPR = 2
C      PUT PUT FROM SETID ON TAPE1 (AND OPTIONALLY OUTAPE 9 ALSO)
NCUT2= 0
CHECK TO SEE IF SECOND COPY OF UPDATE TAPE WANTED
IF (NCON(5),EQ,8MBACKUP ) NCUT2=9
NCUT1 = 1
CHECK TO SEE IF RUN EVENT IS GIVEN
IF (NCON(6),NE,1M ) GO TO 6
XN=GETUATE(X)
NCON(6)=UPDATE
6 CONTINUE
NCPSET = 4
CHECK TO SEE HOW SETS WILL BE GENERATED
IF (NCON(7) ,EQ, 8MANUAL ) NCPSET = 5
IF (NCON(7) ,EQ, 8MAXSET ) NCPSET = 1
NNH=1
PRINT 104,NCON(2),INTAPE,NCON(6)
C      IF STATEMENTS TO CHOSE APPROPRIATE PRINTS
IF (NCUT2,GT,0) PRINT 105,NCUT1,NCUT2
IF (NCUT2,LE,0) PRINT 106,NCUT1
IF (NPR,EQ,1) PRINT 100

```

106000
107000
108000
109000
110000
111000
112000
113000
114000
115000
116000
117000
118000
119000
120000
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122000
123000
124000
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143000
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146000
147000
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149000
150000
151000
152000
153000
154000
155000
156000
157000
158000
159000
160000
161000
162000
163000

FTMS.5

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PAGE NO. 4

```

C
IF (NPSSET.EQ.1) PRINT 10Y
NTEMP=14
IF STATEMENT15 TO SET UP PROPER OPTION PRINT
IF (NPSSET.EQ.4) NHUN=OHSLDE OH
IF (NPSSET.EQ.4) NTEMP=BMCLASS
IF (NPSSET.NE.1.AND.NPSSET.NE.5) PRINT 111,NHUN,NTEMP
IF (NPSSET.EQ.5) PRINT 112
NUM = 1
NUSED = NUSED + 1
NPSUSU(NUSED) = 8HSE11D
CALL SET1D
GO TO 7C
500 CONTINUE
CALL MAKEBAS
GO TO 7C
600 CONTINUE
INTAPE = 7
CALL PRCONLY
GO TO 7C
END

```

164000
165000
166000
167000
170000
171000
172000
173000
174000
175000
176000
177000
178000
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183000
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186000

5.4TS QUIKBASE

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5

IDENI — QUIKBASE

U1503
U0423

QUIKBASE

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

OPTIONS
HIST

EXTERNAL SYMBOLS

GOENTRY
THEND.
HOUSTOPS
OBUOICT.
ABORT
GETDATE
FASTSET
SETU
MAKEDAS
PHONLY
HEW.
TSH.
DEC.
STM.
SLC.
SLI.
UNSLINGL.

5.475 QUIKBASE

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ED 0

6

X00005 ABCOT
PU1473 CNVRT1.00532
00642
01045
01337
00423
00423
00423
00637
00425
00506
00577
00527
01061
01233
01365
0147000576
00655
01046
01340
00423
00423
00423
00652
00427
00511
00640
00755
01062
01166
01236
0137201232
00657
01075
01353
00423
00423
00423
00754
00441
00514
00640
00762
01070
01171
01243
0137500661
01133
01434
00423
00423
00423
01235
00447
00522
00645
01001
01110
01176
01201
01320
0140700757
01134
01435
00423
00423
00423
00453
00526
00644
01020
01132
01204
01326
0143100774
01240
01147
00423
00423
00423
00456
00531
00700
01030
01136
01207
01334
0143700775
01322
01323
00423
00423
00423
00465
00566
00726
01037
01144
01222
01350
0144700776
01323
01324
00423
00423
00423
00470
00572
00741
01042
01151
01226
01355
0146001044
01324
00423
00423
00423
00503
00575
00747
01050
01156
01231
01362
01463PU1474 ENDING.
PU0000 EXIT.
X00007 FASTSET
PU00014 FORMAT.00471
00627
01414
0127300534
00763
0145400544
01246
0125400554
01262
0130300560
01270
0130700615
01307X00006 GETDATE
PU0445 G60COCG.
PU0457 G60CUC1.
PU0471 G60CUC2.
PU0507 G60CUC3.
PU0515 G60CUC4.
PU0532 G60CUC5.
PU0576 G60CUC6.
PU0646 G60CUC7.
PU0665 G60CUC10.
PU0753 G60CUC11.
PU0763 G60CUC12.
PU1002 G60CUC13.
PU1034 G60CUC14.
PU1051 G60CUC15.
PU1063 G60CUC16.
PU1103 G60CUC17.
PU1123 G60CUC20.
PU1137 G60CUC21.
PU1152 G60CUC22.
PU1162 G60CUC23.
PU1172 G60CUC24.
PU1202 G60CUC25.
PU1210 G60CUC26.
PU1232 G60CUC27.
PU1244 G60CUC30.
PU1327 G60CUC31.
PU1343 G60CUC32.
PU1356 G60CUC33.
PU1366 G60CUC34.
PU1375 G60CUC35.00471
00627
01414
0127300534
00763
0145400544
01246
0125400554
01262
0130300560
01270
0130700615
01307

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P01026	•100041	01024	
P01034	•100042	01025	
P01055	•100043		
P01063	•100044	01052	01054
P01066	•100045	01064	
P01103	•100046	01065	
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P01332	•100071		
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P01356	•100074	01345	
P01360	•100075		
P01366	•100076	01357	
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P01376	•100078	01367	
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P01410	•100080	01377	
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P01423	•100084	01417	
P01427	•100085		
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P01450	•100088	01441	
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P00433	•20		
P00540	•201		
P00544	•202		
P00550	•203		

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P01234 .300	00543			
P00500 .400	00503			
P00512 .401	00650			
P00753 .402	00673			
P00742 .403	00705			
P01034 .404				
P01021 .405				
P01023 .406	00113			
P01462 .500	00547			
P01301 .6	01272			
P01465 .600	00553			
P00445 .70	01217	00557	00563	
P00014 .100	00450	01461	01464	01471
P00371 .100000	00433			
P00372 .100001	00472			
P00373 .100002	00476			
P00374 .100003	00535			
P00375 .100004	00541			
P00376 .100005	00545			
P00377 .100006	00551			
P00400 .100007	00555			
P00401 .100008	00561			
P00402 .100009	00601			
P00403 .100010	00616			
P00404 .100011	00624			
P00405 .100012	00630			
P00406 .100013	00647			
P00407 .100014	00764			
P00410 .100015	01212			
P00411 .100016	01247			
P00412 .100017	01255			
P00413 .100018	01263			
P00414 .100019	01271			
P00415 .100020	01304			
P00416 .100021	01310			
P00417 .100022	01410			
P00420 .100023	01414			
P00421 .100024	01421			
P00422 .100025	01454			
P00422 .101	00523			
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P00105 .105	01131			
P00120 .106	01145			
P00132 .107	00442			
P00136 .108	01363			
P00146 .109	01167			
P00156 .110	01403			
P00172 .111	01432			
P00213 .112	01445			
P00233 .113	00654	00771		
P00237 .114	00750			

5.4TS QUIKBASE

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		G1206	G1230	G1242	G1325	G1341	G1354	G1364	G1374	G1406	G1436	G1446
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P01117	TS000004.	G1113										
X00014	TSh.	G0446										
P00433	WS000001.	G0435										
P01005	WS000002.	G1022										
P01074	WS000003.	G1100										
P01114	WS000004.	G1120										
P01502	X	G0606										
P00013	KN	G0607										
			G1100									
			G1120									
			G1275									
			G1276									

00376 SYMBOLS

PTN5.5

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1

```

SUBROUTINE ADDSET(I)
  CSUBR      ADUSET  START *****
  CUSE      SETIDU  START *****
  CENU      COMMON/SETIDU/ID(50),INDEX,JINDEX,IAUTS *****
  C          SETIDU *****
  C          J=ILCKK(JINDEX,I) *****
  C          IS SET NUMBER STORED IN ID ARRAY *****
  C          IF (J.EQ.0) I=2 *****
  C          IS ARRAY FULL *****
  C          1 IF (JINDEX.EQ.50) 3*5 *****
  C          3 PRINT 4,I *****
  C          4 FORMAT(2X,14MIU OVERFLOW,I=,IS) *****
  C          RETURN *****
  C          5 JINDEX=JINDEX+1 *****
  C          2 ID(JINDEX)=I *****
  C          END *****

```

1000
4000
2000
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
13000
14000

5.475 AUDSET

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES
EXTERNAL SYMBOLS
THEND.
ORUOLCT.
ILCK
SIR.
QNSINGL.

IDENT

W0104
W0012
W0065

AUDSET

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 P00046 BEGIN. U0065
 P00045 CAVR11. U0032
 P00003 CAVMI. U0035
 P00001 DICT. U0014
 P00006 ENDING. U0015
 P00000 EXIT. U0071
 P00003 FORMAT. U0064
 P00020 FP000C1. U0062
 P00031 FP000C2. U0060
 P00040 FP000C3. U0053
 P00102 GETPL. U0056
 P00072 GETPU. U0025
 P00035 GG000C0. U0020
 P00003 I U0040
 C00004 I AUTO U0042
 C00000 ID U0016
 X00003 ILCK U0015
 C00062 INDEX U0015
 P00023 .1 U0022
 P00043 .2 U0024
 P00025 .3 U0030
 P00036 .5 U0021
 P00003 .4 U0020
 P00103 J INDEX U0020
 C00063 PF000C2. U0057
 P00065 Q8001C1. U0000
 X00002 Q8001C1. U0044
 X00004 STH. U0026
 X00001 TWEND. U0033
 U0040 SYMBCL5

U0073 U0077
 U0017 U0027 U0051 U0052
 U0035 U0043 U0046 U0047 U0050
 U0063
 U0061
 U0076
 U0031

U0023 U0023 U0036 U0037 U0041 U0041
 U0013

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```

SUBROUTINE BUFFIT(IGONE)
  BUFFIT  START *****
  C*** THE FUNCTION OF SUBROUTINE BUFFIT IS TO BUFFER IN COMPLETE ITEMS
  C*** THAT ARE TO BE ADDED TO THE DATABASE. THESE ITEMS ARE
  C*** RETURNED TO SUBROUTINE NEWDATA VIA THE ARRAY INSTUFF & NCRDS
  C*** AT A TIME.
  CUSE ITSTUFF  START *****
  C*** COMMON/ITSTUFF/ITSTUFF(56)
  CEND ITSTUFF *****
  CUSE MYTAPES  START *****
  C*** COMMON/MTAPES/INUNIT,JFIN,LCUT,KTAPECUT,KINCARDUS
  CEND MYTAPES *****
  CUSE MYGCODES  START *****
  C*** COMMON/PGGCODES/MLINE,ISET,JSET,NEWDATE
  CEND MYGCODES *****
  CUSE MYINPUT  START *****
  C*** COMMON/PGYINPUT/INSTUFF(10)
  CEND MYINPUT *****
  CUSE NEWSET  START *****
  C*** COMMON/NEWSET/NEWSET
  CEND NEWSET *****
  DATA(IGC=1),(MIN=1),(MAX=8)
  IF(IGC) 1,6
  C*** BUFFER IN NEXT ITEM
  C*** 1 BUFFER IN (INUNIT,0)(ITSTUFF(1),ITSTUFF(56))
  C*** 2 IS BUFFER OPERATION COMPLETE
  C*** 3 IFUNIT,(INUNIT) 2,3,13,16
  C*** 4 CONTINUE
  C*** DETERMINE SET NUMBER FOR THIS ITEM
  C*** MYSET=NUMGET(1:ITSTUFF(8),8)
  C*** 100=0
  C*** 5 IS THE SET NUMBER CORRECT
  C*** IF(MYSET.EQ.NEWSET.OR.MYSET.EQ.ISET) 5,12
  C*** REMOVE SET NUMBER BEFORE TRANSFERRING ITEM TO THE DATABASE
  C*** 5 ITSTUFF(8)=0
  C*** 6 IS THE CURRENT LINE IN BUFFER AREA BLANK
  C*** 6 DO 100 LIM = 1,6
  C*** MPIN = MIN + LIM-1
  C*** IF (ITSTUFF(MPIN).EQ.1M) 100,7
  C*** 100 CONTINUE
  C*** IF (MAX.GE.56) 10,110
  C*** 110 MIN = MAX + 1 $ MAX = MIN + 7 $ GO TO 6
  C*** MOVE PROPER & NCRDS TO INSTUFF ARRAY
  C*** 7 N=0
  C*** DO 8 I=MIN,MAX
  C*** N=N+1
  C*** 8 INSTUFF(N)=ITSTUFF(I)
  C*** HAS ALL DATA BEEN TRANSFERRED
  C*** IF (MAX.GE.56) 11,9
  C*** 9 CALCULATE INDEXES FOR NEXT 8 WORDS
  C*** MIN=MAX+1
  C*** MAX=MIN+7
  C*** RETURN
  C*** RE-INITIALIZE INDEX NUMBERS, A BLANK LINE HAS BEEN DETECTED IN
  C*** THE INPUT BUFFER AREA
  C*** 10 MIN=1

```

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```

MAX#3
GC TO 1
C*** A NEW SET OF DATA HAS BEEN ENCOUNTERED, RE-INITIALIZE INDEX NUMBER
12 BACKSPACE INUNIT
13 IUCNE #1
C*** TRANSFER OF ALL DATA IN INPUT BUFFER AREA HAS BEEN COMPLETED.
C*** RE-INITIALIZE INDEX NUMBERS
11 IGC#1
14 MIN#1
MAX#8
RETURN
C*** END OF FILE HAS BEEN ENCOUNTERED, REWIND INPUT TAPE
15 REWIND INUNIT
GC TO 13
C*** A PARITY ERROR HAS BEEN DETECTED, PRINT ERROR MESSAGE AND
C*** TERMINATE PROGRAM
16 PRINT 17,INUNIT
17 FORMAT(1H,10X,19H)PARITY ERROR ON LTN #13,15H JOB TERMINATED )
END
46000
47000
48000
49000
50000
51000
52000
53000
54000
55000
56000
57000
58000
59000
60000
61000
62000
63000
64000

```

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

IDENT BUFFIT
J0223
J0025
J0070
J0005
J0004
J0011
J0001

ITSTUFF
MYTAPES
MYGROSS
MYINPUT
NEWSET

EXTERNAL SYMBOLS

TEND.
QUODICT.
NUNGET
QBWIFUN
BSP.
RCW.
BFI.
STM.
QNSJWGL.

5.4TS	BUFFIT	11/24/71	ED	0	PAGE NO.	4
POU162	BEGIN.	00176	00210			
XOU007	BFI.	00035				
XOU005	BSP.	00132				
POU025	BUFFIT	00025				
POU161	CNR11.	00154				
POU215	CAUNT.	00107				
POU006	CRFMT.	00157				
POU001	DICT.	00027				
POU177	ENDING.	00030				
POU000	EXIT.	00202				
POU006	FORMAT.	00062				
POU134	FP00001.	00174				
POU213	GEPL.	00167				
POU203	GETPU.	00172				
POU157	GG00001.	00147				
POU216	I	00105				
POU006	LOGNE	00135				
POU055	IFO0001.					
POU003	IG	00031				
POU162	INITIAL.	00036				
CU0000	INSTUFF	00115				
CU0000	INUNIT	00033				
CU0001	ISET	00056				
CU0000	ITSTUFF	00037				
POU072	.100					
POU126	.10	00075				
POU033	.1	00032				
POU077	.110	00075				
POU136	.11	00120				
POU131	.12	00057				
POU134	.13	00146				
POU140	.14					
POU143	.15	00044				
POU147	.16	00044				
POU040	.2	00042				
POU045	.3	00043				
POU051	.4					
POU060	.5	00054				
POU062	.6	00032				
POU103	.7	00071				
POU113	.8					
POU122	.9	00121				
POU006	..10000	00060				
POU007	..100001	00070				
POU010	..17	00152				
CU0002	JSET					
CU0001	JTIN					
CU0004	KINCARDS					
CU0003	KTAPECUT					
POU217	LIM					
CU0002	LCUT					
POU005	MAX					
POU004	MIN					
POU220	MMIN					
		00063	00065	00072		
		00074	00077	00101		
		00064	00100	00104		
		00066				
		00105	00106	00123	00127	00141
		00117	00122	00124	00130	00142
		00131	00143	00151	00156	00166
		00162	00163	00164	00164	00164
		00042	00045	00151	00156	00166
		00142	00157	00163	00164	00164
		00042	00047	00061	00067	00113
		00047	00061	00067	00113	00113
		00076	00136			
		00121				
		00075				
		00032				
		00075				
		00120				
		00057				
		00146				
		00044				
		00044				
		00042				
		00043				
		00054				
		00032				
		00071				
		00121				
		00060				
		00070				
		00152				
		00063	00065	00072		
		00074	00077	00101		
		00064	00100	00104		
		00066				
		00105	00106	00123	00127	00141
		00117	00122	00124	00130	00142
		00131	00143	00151	00156	00166
		00162	00163	00164	00164	00164
		00042	00045	00151	00156	00166
		00142	00157	00163	00164	00164
		00042	00047	00061	00067	00113
		00047	00061	00067	00113	00113
		00076	00136			
		00121				
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		00070				
		00152				
		00063	00065	00072		
		00074	00077	00101		
		00064	00100	00104		
		00066				
		00105	00106	00123	00127	00141
		00117	00122	00124	00130	00142
		00131	00143	00151	00156	00166
		00162	00163	00164	00164	00164
		00042	00045	00151	00156	00166
		00142	00157	00163	00164	00164
		00042	00047	00061	00067	00113
		00047	00061	00067	00113	00113
		00076	00136			
		00121				
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		00070				
		00152				
		00063	00065	00072		
		00074	00077	00101		
		00064	00100	00104		
		00066				
		00105	00106	00123	00127	00141
		00117	00122	00124	00130	00142
		00131	00143	00151	00156	00166
		00162	00163	00164	00164	00164
		00042	00045	00151	00156	00166
		00142	00157	00163	00164	00164
		00042	00047	00061	00067	00113
		00047	00061	00067	00113	00113
		00076	00136			
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		00063	00065	00072		
		00074	00077	00101		
		00064	00100	00104		
		00066				
		00105	00106	00123	00127	00141
		00117	00122	00124	00130	00142
		00131	00143	00151	00156	00166
		00162	00163	00164	00164	00164
		00042	00045	00151	00156	00166
		00142	00157	00163	00164	00164
		00042	00047	00061	00067	00113
		00047	00061	00067	00113	00113
		00076	00136			
		00121				
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		00070				
		00152				
		00063	00065	00072		
		00074	00077	00101		
		00064	00100	00104		
		00066				
		00105	00106	00123	00127	00141
		00117	00122	00124	00130	00142
		00131	00143	00151	00156	00166
		00162	00163	00164	00164	00164
		00042	00045	00151	00156	00166
		00142	00157	00163	00164	00164

5.4TS

BUFFT

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5

P00221	MYSET	00050	00052	00055	00114
P00222	N	00104	00111	00112	
C00003	NEWDATE				
C00000	NEWSET	00053	00053		
C00000	NLINE				
X00003	NUMGET	00045			
P00176	PF00002.	00173			
X00002	Q000101.	00000	00026		
X00004	Q001FUN1	00041			
X00011	QNSINGL.	00160			
X00006	REW.	00144			
X00010	STM.	00150			
X00001	THEND.	00155			
P00117	T500002.	00106			
P00064	W500001.	00073			
P00111	W500002.	00116			
	00106 SYMBOLS				


```

SUBROUTINE CARUCK
  CSUBR      CARUCK  START *****
  CUSE      OPTIONS  START *****
  COMMON / OPTIONS/ NCON(8),INTAPE,NCUT1,NCUT2,NPR,NUM,NCPSET
  1  ISETSI2 *****
  CEND *****
  C*** THIS SUBROUTINE CHECKS FOR PROPER SEQUENCE OF INPUT DATA CARDS
  C AND WRITES THE DATA TO TAPE KINCARDS
  C
  CUSE DIMENSION INCARD(8) *****
  CEND MYTAPES  START *****
  CUSE COMMON/MTAPES/INUNIT,JTIN,LCUT,KTAPESOUT,KINCARDS *****
  CEND MYTAPES *****
  CUSE ITP  START *****
  CEND ITP *****
  CUSE ITP *****
  CEND NCERRORS  START *****
  CUSE COMMON/NCERRORS/NCERRORS,NAMEOF,NRPHONE,IWANTBU *****
  CEND NCERRORS *****
  NCERRORS=ICLUSE1=ICLDFLINE=0
  LASTREP = -100
  LASTADD = -200
  C*** READ FIRST OPTION CONTROL CARD
  100 READ 3002,(INCARD(I),LCOMTEST,(INCARD(I),I=2,8))
  IF (LCOMTEST.EQ.1MX) 410
  C*** IS THIS AN OPTION CONTROL CARD OR A NEW DATA CARD
  41 CONTINUE
  ISET = NUMGET(INCARD(2),8)
  JIMSET = ISET
  LINENG = NUMGET(INCARD(3),8)
  DECODE(8,400,INCARD(1)) IIST
  IF (IIST.EQ.1MX) GO TO 411
  IF (IIST.EQ.1MX) GO TO 411
  IF (IIST.EQ.1MX) GO TO 411
  333 INCARD(1) = 0DELETE
  LASTREP = -100
  LASTADD = -200
  GO TO 3
  411 INCARD(1) = 8RAUDAFER
  LASTADD = ISET + 10000 + LINENG
  IF (INCARD(7).EQ.6HNEWSET) JIMSET = NUMGET(INCARD(8),8)
  GO TO 3
  111 INCARD(1) = 7HREPLACE
  LASTREP = ISET + 10000 + LINENG
  LASTADD = -200
  3 CONTINUE
  CALL ADDSET(JIMSET)
  C*** CHECK FOR PROPER SEQUENCING OF SET AND LINE NUMBERS
  4 IF (ISET-ICLUSE1)8,6,14
  ICLDFSET=ISET
  ICLDFLINE=0
  61 IF (LINENG.GT.ICLDFLINE) 5,8
  5 ICLDFLINE=LINENG
  C*** WRITE CARD IMAGES OUT ON TAPE
  6 ITP = 10
  CALL WRARAY(INCARD,8)
  PRINT 600,(INCARD(1),LCOMTEST,(INCARD(I),I=2,8))

```

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```

C*** AN OPTION CONTROL CARD WITH 4HLAST IN THE FIRST FOUR COLUMNS
C*** SIGNIFIES THE END OF THE INPUT CARDS
  IF (INCARD(1).EQ. 4HLAST) 7,100

7 CONTINUE
  NAMECF = INCARD(2)
  ITP = 10
  CALL TERMTAP
  NMPHNE=INCARD(3)
  RETURN

C*** POSSIBLE SEQUENCE ERROR
  6 IF (LASTREP - LASTAUD) 9, 5, 9
C*** CONTROL CARD SEQUENCE ERROR
  9 NCERRORS = NCERRORS + 1
C*** PRINT CARD IMAGES THAT ARE OUT OF SEQUENCE
  PRINT 200, (INCARD(1),LCOMTEST,(INCARD(1),1-2,8))
  GO TO 100

  77 NCERRORS=NCERRORS+1
C*** PRINT INCORRECT CONTROL CARD
  PRINT 3001, (INCARD(1),LCOMTEST,(INCARD(1),1-2,8))
  GO TO 100

  400 FORMAT( A1,7X)
  300 FORMAT(8(A8,2X))
  600 FORMAT(5X,A8,1X,A1,7(A8,2X))
  200 FORMAT(//* CONTROL NUMBERS OUT OF SEQUENCE *,A8,1X,A1,7(A8,2X)//)
  3001 FORMAT(//* INCORRECT CONTROL CARD *,A8,1X,A1,7(A8,2X)//)
  3002 FORMAT(A8,1X,A1,7(A8,2X))
END

```

47000
48000
49000
50000
51000
52000
53000
54000
55000
56000
57000
58000
59000
60000
61000
62000
63000
64000
65000
66000
67000
68000
69000
70000
71000
72000
73000

DATES CARDCK

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

CARDCK

OPTICS
MYIAPES
IIP
NCEHROKS

EXTERNAL SYMBOLS

THEND.
QMSDIEL.
NOMGET
ADUSEI
WHARRY
TERRIAP
TSM.
DEC.
SIM.
QMSINDL.

IDENT

CU373
CU121
CU017
CU005
CU001
CU004

CARDCK

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ED

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3

S.ATS	CANUCK	11/24/71	EO	0	PAGE NO.	4
XU0004	ADDSET	U0232				
P00355	REGIN.	U0355				
P00121	CARDK	U0121				
P00354	CNVRT1.	U0342	U0144	00171	00262	00263
		U0353	U0353	00353	00266	00320
P00013	CRFMT.	U0353	U0353	00353	00266	00320
XU0010	DEC.	U0166				
P00001	DICT.	U0123	U0135	00155	00162	00221
		U0272	U0302	00330	00336	00233
		U0305	U0305			
P00356	ENDING.	U0124				
P00003	EXIT.	U0356				
P00010	FCRMT.	U0152	U0175	00200	00206	00212
P00152	G60000.	U0133				
P00175	G600001.	U0165				
P00273	G600002.	U0255				
P00331	G600003.	U0313				
P00352	G600004.	U0334				
P00361	I	U0143	U0145	00264	00265	00322
		U0346	U0146	00264	00265	00323
P00003	INCARD	U0261	U0146	00163	00170	00216
		U0124	U0266	00275	00303	00340
P00355	INITIAL.					
C00010	INTAPE					
C00000	INUNIT					
P00362	ICLDLINE	U0126	U0242	00247		
P00363	ICLDSET	U0126	U0241			
P00364	ISET	U0157	U0213	00235	00240	
C00016	ISETSIZ					
C00000	ITP	U0250	U0251	00277	00300	
P00365	ITST	U0172	U0175	00200	00203	
C00003	IWANTEU					
P00133	I00	U0274	U0331	00352		
P00177	I00001					
P00200	I00002	U0176				
P00202	I00003					
P00203	I00004	U0201				
P00205	I00005					
P00206	I00006	U0204				
P00220	I00007					
P00224	I00008	U0217				
P00225	I11	U0202				
P00232	J	U0211	U0224			
P00206	J333					
P00240	J4					
P00154	J41					
P00212	J411	U0177				
P00246	J5	U0307				
P00250	J6	U0153				
P00243	J61	U0236				
P00275	J7					
P00332	J77	U0205				
P00306	J8	U0237				
P00311	J9	U0244	00245			
P00013	J100000	U0310				
		U0153				

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PU0014	..1J0001	00176			
PU0015	..100002	00201			
PU0016	..100003	00204			
PU0017	..100004	00206			
PU0020	..100005	00212			
PU0021	..100006	00216			
PU0022	..100007	00225			
PU0023	..100008	00274			
PU0050	..200	00316			
PU0030	..300				
PU0071	..3001	00337			
PU0110	..3002	00136			
PU0024	..400	00170			
PU0036	..600	00260			
PU0366	JIMSET.		00223	00234	
CU0001	JTIN				
CU0004	KINCARDS				
CU0003	KTAPESUT				
PU0367	LASTADU	00132	00211	00215	00231
PU0370	LASTREP	00131	00210	00230	00306
PU0371	LCMTST	00142	00152	00263	00321
PU0372	LINENC	00164	00214	00227	00243
CU0002	LCUT				
CU0001	NAMECF	00276	00276		
CU0000	NCGN				
CU0000	NDERRORS	00127	00127	00311	00311
CU0015	NGPSET				
CU0011	NGUT1				
CU0012	NGUT2				
CU0013	NPR				
CU0002	NAPHCNE	00304	00304		
CU0014	NUM				
X00003	NUMGET	00154		00220	
X00002	Q80DICT.	00000			
X00012	QNSINGL.	00353			
X00011	STM.	00256	00314	00335	
X00006	TERMTAP	00301			
X00001	THENO.	00150	00173	00271	00350
X00007	TSH.	00134			
X00005	WHARRAY	00252			
PU0144	WS00001.	00147			
PU0265	WS00002.	00270			
PU0323	WS00003.	00326			
PU0344	WS00004.	00347			
	00136 SYMBGLS				

00333

00332

00332

00312

00311

00311

00312

00311

00312

00311

00312

00311

00312

00311

00312

```

SUBROUTINE COPYDB
  CSUBR      COPYDB  START *****
  CUSE      MYIDENT START *****
  CEND      COMMON/MYIDENT/MYIDENT *****
  CUSE      MYIDENT *****
  CEND      ITP START *****
  CUSE      COMMON/ITP/ITP *****
  CEND      ITP *****
  CUSE      OPTIONS START *****
  CEND      COMMON / OPTIONS/ NCGN(8),INTAPE,NCUT1,NCUT2,NPR,NUM,NQPSSET *****
  CUSE      1,ISZSIZ *****
  CEND      OPTIONS *****
  CUSE      DIMENSION JUNK(10) *****
  CEND      MYIDENT=8HDATA8U8P *****
  CUSE      ITP = NCUT1 *****
  CEND      CALL SETREAU *****
  CUSE      MYIDENT=8HDATA8U8Z *****
  CEND      ITP = NCUT2 *****
  CUSE      CALL SETWRITE *****
  CEND      1 ITP = NCUT1 *****
  CUSE      CALL RUARRAY(JUNK,10) *****
  CEND      ITP = NCUT2 *****
  CUSE      CALL WRARRAY(JUNK,10) *****
  CEND      IF(JUNK(1).EQ.8HENDINPWT) 2,1 *****
  CUSE      2 ITP = NCUT1 *****
  CEND      CALL TERMTP *****
  CUSE      ITP = NCUT2 *****
  CEND      CALL TERMTP *****
  CUSE      RETURN *****
  CEND      END *****

```

SATS COPYDB 11/24/71 E0 0 PAGE NO. 2

IDENT COPYDB

UUU7U
UUU2U

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

COPYDB

MYIDENT
ITP
OPTIONS

UUU01
UUU01
UUU17

EXTERNAL SYMBOLS

QUUDICT.
SETREAU
SEIWHITE
ROADRAY
WNAHAY
TERMIAP

S-#TS	COPIED	11/24/71	ED	0	PAGE NO.	3
PU0065	REGIN.					
PU0020	COPIED					
PU0001	DICT.					
PU0066	ENDING.					
PU0000	EXIT.					
PU0015	FORMAT.					
PU0065	INITIAL.					
CO0010	INTAPE					
CU0016	ISETS12					
CU0000	ITP					
PU0040	.1					
PU0054	.2					
PU0015	..100000					
PU0016	..100001					
PU0017	..100002					
PU0003	JUNK					
CU0000	MYIDENT					
CU0000	NCGN					
CU0015	NCPSET					
CU0011	NCUT1					
CU0012	NCUT2					
CU0013	NPR					
CU0014	NUM					
XU0001	QBQDICT.					
XU0004	WDARRAY					
XU0002	SETREAD					
XU0003	SETWRITE					
XU0006	TERMTAP					
XU0005	WRARRAY					
UU0035	SYNDCLS					
UU0065		UU027	UU035	UU035	UU035	UU035
UU0020		UU061	UU053			
UU0022		UU024	UU032			
UU0023		UU053	UU025			
UU0066		UU051	UU052	UU033		
UU0024		UU025	UU033			
UU0023		UU027	UU035	UU035	UU035	UU035
UU0064		UU037	UU043	UU050	UU057	UU063
UU032		UU052				
UU026		UU026	UU040	UU054	UU054	UU054
UU034		UU034	UU045	UU060	UU060	UU060
UU021		UU021				
UU042						
UU030						
UU036						
UU056		UU062				
UU067						

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```

SUBROUTINE COUNTOS(MYDESIG )
  CSUBR
  CUSE  COUNTDES J2AUG71 *****
      KKSET  START *****
  CEND  COMMON/KKSET/KKSET *****
      DATA (KKSET=1) *****
  CUSE  IDESIGS  START *****
      COMMON/IDESIGS/IDESIGS(250), DESIGNC(250,3)
  CEND  TYPE INTEGER DESIGNC *****
      IDESIGS  *****
  CUSE  NCDESIGS  START *****
      COMMON/NCDESIGS/NCDESIGS(2),KKMIN(2)
  CEND  NCDESIGS *****
      DATA (NCDESIGS = 0.0), (KKMIN = 1, 126)
  C      DATA (FIRST=1)
  C      IS THIS THE FIRST CALL ON ROUTINE
  C      IF (FIRST .LE. 0) GO TO 14
  C      17  IF (FIRST=0)
  C           DC 18 K1 = 1, 250
  C           DC 18 K2=1,3
  C           DESIGNC(K1,K2)=0
  C           19  CONTINUE
  C           IF = KKSET
  C           DECODE (8,100,MYDESIG)LDUES,KDESIG
  C           CHECK FOR REGION ONE
  C           IF (KDESIG.LI.500)1,2
  C           1  IREG = 1
  C           GO TO 5
  C           CHECK FOR REGION TWO
  C           2  IF (KDESIG.LI.400)3,4
  C           3  IREG = 2
  C           GO TO 5
  C           4  IREG = 3
  C           5  KK = KKMIN(1)
  C           MAX=KK+NCDESIGS(1)-1
  C           LOOP TO CHECK FOR NEW DESIG
  C           DC 20 J=KK+MAX
  C           IF (LDUES.EQ.LDUES(J)) 11,20
  C           20  CONTINUE
  C           J=MAX+1
  C           NCDESIGS(1)=NCDESIGS(1)+1
  C           IDESIGS(J) = LDUES
  C           11  DESIGNC(J,IREG) = DESIGNC(J,IREG) + 1
  C           RETURN
  C           100 FORMAT (A2,I3,J3)
  C           END

```

5.5TS COUNTDS

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

COUNTDS

KKSET

1DESIGS

NCDESIGS

EXTERNAL SYMBOLS

THEND.

Q88DICT.

DEC.

CMSINGL.

IDENT

U0247
U0011

U0001
U1750
U0004

COUNTDS

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ED

0

PAGE NO.

2

5.4TS COUNTDS

PAGE NO. 3

ED 0

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PG0204 BEGIN.
 PG0131 CNVRFL.
 PG0111 COUNTOS
 PG0004 CHPMI.
 X00003 DEC.
 CU0372 DESIGNC
 PG0001 DICT.
 PG0220 ENDING.
 PG0000 EXIT.
 PG0004 FCHMAT.
 PG0044 FPG0001.
 PG0234 GETPL.
 PG0224 GETPU.
 PG0052 GG0000.
 CU0000 IDESIGS
 PG0003 IFIRST
 PG0236 II
 PG0132 IN00001.
 PG0133 IN00004.
 PG0204 INITIAL.
 PG0237 IREG
 PG0055 .1
 PG0020 .1000C1
 PG0021 .1000C2
 PG0124 .11
 PG0021 .17
 PG0031 .18
 PG0037 .19
 PG0110 .20
 PG0061 .2
 PG0064 .3
 PG0070 .4
 PG0073 .5
 PG0004 .100
 PG0240 J
 PG0241 K1
 PG0242 K2
 PG0243 KDESIG
 PG0244 KK
 CU0002 KKMIM
 CU0000 KKSET
 PG0245 LDES
 PG0246 MAX
 PG0004 MYDESIG
 CU0000 NCDESIGS
 PG0134 PG000000
 PG0146 PG0001-U
 PG0162 PG0002-U
 PG0217 PG000C2.
 X00002 QSQDICT.
 X00004 QNSINGL.
 X00001 THEND.
 PG0112 TSQ0003.
 PG0140 UP000000.

00217
 00045
 00011
 00130
 00042
 00031
 00113
 00014
 00223
 00216
 00211
 00214
 00041
 00105
 00015
 00040
 00030
 00124
 00014
 00056
 00016
 00017
 00107
 00020
 00106
 00053
 00062
 00060
 00044
 00101
 00023
 00026
 00047
 00075
 00002
 00003
 00046
 00100
 00044
 00003
 00136
 00151
 00164
 00215
 00000
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 00050
 00103
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00225
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 00043
 00127
 00230
 00106
 00022
 00073
 00134
 00162
 00065
 00054
 00063
 00067
 00105
 00034
 00154
 00052
 00100
 00074
 00037
 00122
 00112
 00076
 00035
 00012

00231
 00125
 00051
 00204
 00123
 00123
 00117
 00144
 00172
 00071
 00110
 00141
 00061
 00074
 00037
 00122
 00114
 00076
 00134
 00135

00125
 00126
 00207
 00210
 00205
 00123
 00146
 00202
 00176
 00115
 00122
 00167
 00105
 00074
 00052
 00100
 00074
 00037
 00122
 00114
 00120
 00121

00206
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 00145
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 00134
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 00145
 00143

5.4TS COUNTDS

	11/24/71	ED	0	PAGE NO.
P00153 UP000C1.	00147	00154	00155	00156
P00166 UP000C2.	00148	00155	00156	00157
P00175 UP000C4.	00149	00156	00157	00158
P00025 W5000C1.	00150	00157	00158	00159
P00031 W5000C2.	00151	00158	00159	00160
P00104 W5000C3.	00152	00159	00160	00161
00074 SYMBOLS	00153	00160	00161	00162
	00154	00161	00162	00163
	00155	00162	00163	00164
	00156	00163	00164	00165
	00157	00164	00165	00166
	00158	00165	00166	00167
	00159	00166	00167	00168
	00160	00167	00168	00169
	00161	00168	00169	00170
	00162	00169	00170	00171
	00163	00170	00171	00172
	00164	00171	00172	00173
	00165	00172	00173	00174
	00166	00173	00174	00175
	00167	00174	00175	00176
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	00175	00182	00183	00184
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	00270	00277	00278	00279
	00271	00278	00279	00280
	00272	00279	00280	00281
	00273	00280	00281	00282
	00274	00281	00282	00283
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	00356	00363	00364	00365
	00357	00364	00365	00366
	00358	00365	00366	00367
	00359	00366	00367	00368
	00360	00367	00368	00369
	00361	00368	00369	00370
	00362	00369	00370	00371
	00363	00370	00371	00372
	00364</			

```

SUBROUTINE FASTSET
  FASTDATA 2USEPT1 *****
  ITP START *****
  COMMON/ITP/ITP *****
  MYTAPES START *****
  COMMON/MTAPES/INUNIT,JTIN,LCUT,MTAPEOUT,KINCARUS *****
  MYTAPES *****
  DATA(KTAPEOUT = 7) *****
  LIN 1 IS THE INPUT DATA TAPE *****
  LIN 2 IS RESERVED FOR ADDING DATA FROM TAPE *****
  LIN 3 IS RESERVED FOR ADDING DATA FROM TAPE *****
  LIN 4 IS RESERVED FOR ADDING DATA FROM TAPE *****
  LIN 5 IS RESERVED FOR ADDING DATA FROM TAPE *****
  LIN 6 IS THE OUTPUT DATA TAPE *****
  LIN 7 IS THE QUICK DATA BASE TAPE *****
  LIN 8 IS RESERVED FOR COPY OF LIN-6 *****
  ICKTST START *****
  COMMON/ICKTST/ICKTST *****
  ICKTST *****
  TWORD START *****
  COMMON/TWORD/TWORD,ITWORD *****
  EQUIVALENCE (TWORD,ITWORD) *****
  TWORD *****
  ERRCRM START *****
  COMMON/ERRCRM/ERR,IERM *****
  ERRCRM *****
  DATA(JERR=9),(IERM=0) *****
  LIN 9 IS RESERVED FOR WRITING OUT ERROR MESSAGES *****
  NERRORS START *****
  COMMON/NCERRORS/NCERRORS,NAMEOF,NPHONE,INANTBU *****
  NERRORS *****
  DIMENSION NERRS(15) *****
  NOPRINT START *****
  COMMON/NCPRINT/NCPRINT *****
  NOPRINT *****
  MYIDENT START *****
  COMMON/MYIDENT/MYIDENT *****
  MYIDENT *****
  SETIDU START *****
  COMMON/SETIDU/SETIDU,INDEX,INDEXA,INDEXB *****
  SETIDU *****
  OPTICS START *****
  COMMON / OPTICS/ NCON(8),INTAPE,NCUT1,NCUT2,NPH,NUM,NOPSET *****
  1 *ISETSIZ *****
  OPTICS *****
  ENTRY FASTDATA *****
  CALL INITFAST *****
  JTIN=INTAPE *****
  LCUT = NCUT1 *****
  JERR=9 *****
  CALL ALLOCIN *****
  NOPRINT = 1 *****
  MYIDENT = RMQUKBASE *****
  CALL INITAP *****
  MYIDENT=8HDATAJB *****

```

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```

IIP = JFIN
NCPRI = 1
CALL SETREAD
ITP=LOUT
MYIDENT=8MDATAURUP
CALL SETWRII
MYIDENT=8HSCRAIC1
KINCARD = IIP = 10
CALL SETWRII
MYIDENT = 8HSCRAIC1
ICKYST = 0
IAUTO = 1
INDEX = 0
J-DEX = 0
IF (NCPRI=2) I-UTC = 0
C IF NO PRINT WANTED TURN OFF IAUTO
C
IIP = JERR
IF (NCPRI=3) CALL INPTCL
CALL SETWRII
NCPRI=1
CALL PAGESKP
CALL SUBROUTINE TO READ AND CHECK SEQUENCE OF
C*** UPDATE OPTION CONTROL CARDS
C*** CALL CARCK
C*** ARE THERE ANY ERRORS
C*** IF (NCPRI=GT.0) I-2
C*** CALL UPDATE SUBROUTINE NEW DATA TO INITIALIZE FOR
C*** SUBSEQUENT CALLS FROM NEWBASE AND NEWDIR
2 CALL NEWDATA
C*** CALL SUBROUTINE MAKEII TO START PROCESSING DATA BASE UPDATE
C*** CALL MAKEITINJAGOUT
C*** CHECK TO SEE IF ANY ERRORS OCCURRED DURING UPDATING
C*** C> THE DATA BASE
CALL PAGESKP
IF (IERSM.GT.0) J-6
3 IIP = JERR
IICORD = 8HALLONE
C LOOP TO WRITE END MARKER ON ERROR FILE
DO 4 I = 1, 20
4 CALL WRICOR
CALL TERMIAP
MYIDENT = 8HSCRAIC1
CALL SETREAD
NUMJRN = 10000
C LOOP TO PRINT ERRORS
DO 10 I = 1, NUMJRN
CALL HOARWAY(NERMS,10)
C CHECK TO SEE IF ALL ERRORS PRINTED
IF (NERMS(1) .EQ. 8HALLONE
PRINT JCU, (NERMS(I), I=1, 10)
10 CONTINUE
11 CONTINUE
NE = I / 2
PRINT 777b, NE
WRITE(44,777b) NE

```

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```

CALL TERMTAP
GO TO B
C CONTINUE
6 PRINT 400
  WHITE (44,400)
5 CONTINUE
C CALL PRICONT
CHECK TO SEE IF COPY OF UPDATE TAPE WANTED
IF (NOUTZ.EU. U) GO TO 7974
7973 CONTINUE
C CHECK TO SEE IF ERRORS PREVENT COPY BEING MADE
IF (IERSN.GT.0) GO TO 7977
CALL COPY08
7974 PRINT 7777
  WHITE (44,7777)
RETURN
7977 PRINT 7978
7978 FORMAT(IX, * NO BACKUP CREATED BECAUSE OF ERRORS *)
GO TO 7974
C
1 PRINT 200, NSEERRMS
  WHITE (44,200), NSEERRMS
  WHITE (44,205), NAMEOF, INRPHONE
200 FORMAT(5X,18,43H SEQUENCE ERRORS OR INCORRECT CONTROL CARDS )
205 FORMAT(5X,28HPLEASE PRINT STANDARD OUTPUT, /5X,
  *9AND CALL *48,16H - PHONE NUMBER *48)
300 FORMAT(1X,10A8)
400 FORMAT(5X,35HNO ERRORS DETECTED FOR THIS UPDATE )
7776 FORMAT(5X,18,42H DATA ERRORS THIS UPDATE)
7777 STOP
END

```

90000
91000
92000
93000
94000
95000
96000
97000
98000
99000
100000
101000
102000
103000
104000
105000
106000
107000
108000
109000
110000
111000
112000
113000
114000
115000
116000
117000
118000
119000
120000
121000

5-4TS FASTSET

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

FASTDATA
FASTSET

I:P
MYTAPES
ICKTST
TWRU
ENKGM
NGERHCHS
NOPRINT
MYIDENT
SETIUD
OPTIONS

EXTERNAL SYMBOLS

THENU.
QUSICPS
QWQICT.
INITFAST
ALGCUIR
INITAP
SETREAD
SETMIT
IMPRICL
PAGESKP
CARDCK
NEWDATA
MAKEIT
WRCHU
TERMIAP
RUARKAY
PRTCNT
COPYOB
STH.
QNSINGL.

IDENT FASTSET

U050U
U0143
U0136
U0001
U0005
U0001
U0001
U0002
U0004
U0001
U0001
U0065
U0017

S.ITS	FASTSET	11/24/71	ED	0	PAGE	NC.	5
XQ0005	ALGOIR	00157					
PQA*70	BEGIN.	00470					
XQ0013	CARDCK	00243					
XQ0467	CNVRT1.	00322					
XQ0022	CPY08	00404					
PQA022	CRFMT.	00431	00351	00437	00457	00460	
PQ0001	DICT.	00463	00463	00463	00463	00463	
		00145	00150	00160	00176	00204	
		00244	00251	00256	00271	00301	
		00343	00346	00353	00361	00364	
		00413	00416	00421	00430	00441	
		00465					00242
PQA*71	ENDING.	00146	00422	00465			00337
PQA000	EXIT.	00471					00410
PQA143	FASTDATA	00143					00462
PQA136	FASTSET	00136					
PQA022	FORMAT.	00163					
PQA327	GG00000.	00313					
PQA344	GG00001.	00335					
PQA354	GG00002.	00344					
PQA365	GG00003.	00357					
PQA373	GG00004.	00355					
PQA*14	GG00005.	00406					
PQA*22	GG00006.	00414					
PQA*31	GG00007.	00423					
PQA*42	GG00010.	00432					
PQA*52	GG00011.	00442					
PQA*63	GG00012.	00452					
PQA*74	I	00267					
CO0064	IAUTC	00272	00304	00327	00332		
CO0000	ICKTST	00220	00225	00226			
CO0000	ID	00217					
CO0001	IERS*	00257	00257	00400	00400		
CO0062	INDEX	00221					
XQ0006	INITAP	00165					
XQ0004	INITFAST	00147					
PQA*70	INITIAL.	00141					
XQ0011	INPRCL	00233					
CO0010	INTAPE	00151					
CO0000	INUNIT						
CO0016	ISETS12						
CO0000	ITP	00172	00200	00200	00207	00210	
CO0000	ITWOKD	00265					
CO0003	IWANTBU						
PQA327	.10	00327					
PQA*32	.1	00247					
PQA225	.100001						
PQA227	.100002						
PQA233	.100003						
PQA235	.100004						
PQA312	.100005						
PQA313	.100006						
PQA377	.100007						
PQA*00	.100008						
PQA*03	.100009						

5.4TS FASTSET

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ED

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PAGE NO.

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P00004	..100010	00401	00402				
P00332	..11	00312					
P00250	..2	00246	00247				
P00262	..3						
P00270	..4						
P00357	..6		00261				
P00400	..7973						
P00406	..7974		00431				
P00423	..7977						
P00373	..8						
P00022	..100000						
P00023	..100001						
P00024	..100002						
P00025	..100003						
P00026	..100004						
P00027	..100005						
P00030	..100006						
P00031	..100007						
P00044	..200						
P00056	..205						
P00100	..300						
P00104	..400						
P00115	..7776						
P00125	..7777						
P00032	..7978						
C00000	JERR	00155	00227	00262	00206	00206	00276
C00003	JNEX	00156	00227				
C00001	JTIN	00171	00171				
C00004	KINCARDS	00210					
C00003	KTAPCUT	00222					
P00475	L	00323					
C00002	LCUT	00177	00177				
X00015	MAKEIT	00154					
C00000	MYIDENT	00170	00170				
C00001	NAMECF	00277	00202	00202	00206	00215	00276
C00000	NCCN	00456					
P00476	NE	00341	00350				
P00003	NERRS	00310	00322				
X00014	NEWDATA	00250					
C00000	NCERRORS	00245	00445	00446			
C00000	NCPRINT	00161	00162	00237	00240		
C00015	NCPSCT						
C00011	NCUT1	00153	00153				
C00012	NCUT2	00375	00375				
C00013	NPR	00223	00223				
C00002	NRPHONE	00460					
C00014	NUM						
P00477	NUMJERN	00303	00330				
X00012	PAGESKP	00441	00455				
X00021	PRTCNT	00373					
X00003	Q800ICT	00000	00137				
X00002	Q800ICPS	00464					
X00024	QNSINGL	00466					

5.ATS	FASTSET	11/24/71	ED	U	PAGE NO.	7
	KU002U RDARHAY					
	KU0007 SETREAU					
	KU0010 SETWRIT					
	KUG023 STM.	U0335				
	KU0017 TERM7AP	U0366	U0407	U0424	U0443	U0453
	KU0001 THEND.	U0352	U0412	U0427	U0450	U0461
	PQ033U TS000C2.	U0363				
	CU000U TWCRD					
	PUG016 MHWMD					
	PUG070 WS000C1.					
	P00305 WS000C2.					
	P00321 WS000C3.					
	U0163 SYMBCLS					

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```

CSUBR      FUNCTION ILOCK(IN,I)
C          ILOCK START *****
C ILOCK=1,FOUND. ILOCK=0 NOT FOUND. *****
CUSE      SETID0 START *****
COMMON/SETID0/ID(50),INDEX,JINDEX,IAUTC *****
CENU      SETID0 *****
C          CHECK TO SEE IF ALL ITEMS ARE TO BE PRINTED *****
          IF (INDEX.EQ.9999)2,4
          * QC 1 J=1,IN *****
          IF (ID(J).EQ. 1)2,1 *****
          1 CONTINUE *****
          ILOCK=0 *****
          RETURN *****
          2 ILOCK=1 *****
          RETURN *****
          END *****
1000
27000
2000
3000
1000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
13000

```

S-4TS ILCK

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES
EXTERNAL SYMBOLS

ILCK
SEIDU
Q89DICT.

IDENT

U0070
U0003
U0065

ILCK

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ED 0

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ILCOCK

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ED

0

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3

P00030 BEGIN.	00050	00057	00063		
P00001 DICT.	00005	00033	00034		
P00051 ENDING.	00006	00024	00026		
P00000 EXIT.	00055				
P00016 FPO0001.	00046	00047			
P00021 FPO0002.	00042	00043			
P00066 GETPL.	00035	00044			
P00056 GETPU.	00040	00062			
P00003 1	00016				
C00064 1AUTC					
C00000 1D	00015	00015			
P00003 ILCOCK	00003				
P00003 IN	00021				
C00062 INDEX	00007	00007			
P00030 INITIAL.	00006				
P00020 .1	00017				
P00025 .2	00011	00017			
P00012 .4	00010				
P00067 J	00013	00014	00020		
C00063 INDEX					
P00044 PF00002.	00041				
P00050 PF00003.	00045				
X00001 Q8001CI.	00000	00004			
P00021 TS0000CI.	00013				
P00027 VALUE.	00054	00026	00054		
P00014 WS0000CI.	00022	00022			
00032 SYMBOLS					

```

SUBROUTINE INITFAST
  CSUBR      INITFAST START *****
  CUSE      DIRECTRY START *****
  COMMON/DIRECTRY/DEF, LASTLIST, INDIR, INDIRLIST, ATNAME(500),
1  IFORMAT(500), LCODE(500), DEFAULT(500), IDEFAULT(500),
2  A1(500), FN1(500), N2(500), FN2(500), LISTCHECK(500),
3  GLCB(500), LISTVALS(2000)
  EQUIVALENCE(N1, FN1), (N2, FN2), (DEFAULT, IDEFAULT)
  TYPE LOGICAL LISTCHECK, GLCB
  TYPE INTEGER ATNAMEX
  TYPE INTEGER ATNAME
  EQUIVALENCE(L501, LISTCHECK), (LOG2, GLCB)
  CUSE      DIRECTRY *****
  COMMON/INDIR=500), (INDIRLIST=2000) *****
  C  ATNAME = BCU NAME OF ATTRIBUTE *****
  C  DEFAULT = UNDEFINED VALUE FOR ATTRIBUTE *****
  C  GLCB = TRUE WHEN GLOBAL DEFINITION IN FORCE. *****
  C  LCODE = CODE SPECIFYING TYPE OF VALUES *****
  C  IDEF = INDEX OF LAST DEFINED ATTRIBUTE IN TABLES *****
  C  IFORMAT = INPUT/OUTPUT CONVERSION FOR VALUES(FORTRAN CONV.) *****
  C  LASTLIST= INDEX OF LAST ENTRY IN LISTVALS *****
  C  LISTCHECK= TRUE FOR LIST CHECKING, FALSE FOR RANGE CHECKING *****
  C  N1 = LOWEST LEGAL VALUE (RANGE CHECK) OR INDEX IN LISTVALS *****
  C  N2 = HIGHEST LEGAL VALUE (RANGE CHECK) OR INDEX IN LISTVALS *****
  C  OF END OF ALLOWED LIST (LIST CHECK) *****
  CUSE      ERMSRM START *****
  COMMON/ERMSRM/JERR, IEMS *****
  CUSE      DATA(JERR=9), (IEMS=0) *****
  CUSE      ICTYST START *****
  COMMON/ICTYST/ICTYST *****
  CUSE      ICTYST *****
  CUSE      ICTROL START *****
  COMMON/ICTROL/ICTROL *****
  CUSE      IDESIG START *****
  COMMON/IDESIG/IDESIG(250), DESIGNC(250,3) *****
  TYPE INTEGER DESIGNC *****
  CUSE      IENDSET START *****
  COMMON/IENDSET/IENDSET *****
  CUSE      IENDSET *****
  CUSE      DATA(IENDSET = 0) *****
  CUSE      ITP START *****
  COMMON/ITP/ITP *****
  CUSE      ITSTUFF START *****
  COMMON/ITSTUFF/ITSTUFF(56) *****
  CUSE      ITSTUFF *****
  CUSE      IWSIDE START *****
  COMMON/IWSIDE/IWSIDE(4) *****
  CUSE      IWSIDE *****
  CUSE      DATA(IWSIDE=4*VALUE, 3*RED) *****
  CUSE      JOESTEST START *****

```

```

COMMON/JDESTES1/JDESTEST
CEND
CUSE
  JDESTEST *****
  KKSET START *****
COMMON/KKSEI/KKSET
CEND
CUSE
  KKSET *****
  MPRTCPT START *****
COMMON/MPRTCPT/MPRTCPT
CEND
CUSE
  MPRTCPT *****
  DATA (MPRTCPT=0)
  MYGCDUS START *****
COMMON/MYGCDUS/NLINE,ISEI,NE=DATE
CEND
CUSE
  MYGCDUS *****
  DATA (ISEI = 0)
  DATA (NE = 0)
COMMON/MYICENT START *****
CEND
CUSE
  MYICENT *****
  MYIDENT *****
COMMON/MYINPUT START *****
CEND
CUSE
  MYINPUT *****
  MYIAPUT *****
COMMON/MYIAPUT/INSTUFF (10)
CEND
CUSE
  MYIAPUT *****
  MYCUT START *****
COMMON/MYCUT/CUTSTUFF (10)
CEND
CUSE
  TYPE INTEGEN OUTSTUFF *****
  MYCUT *****
  MYPRINT *****
COMMON/MYPRINT/ISTAR,NDEFINE,NUNDEF
CEND
CUSE
  TYPE LOGICAL NDEFINE,NUNDEF *****
  MYPRINT *****
  DATA (ISTAR = 1)
COMMON/MYTAPE5 START *****
CEND
CUSE
  MYTAPE5 *****
  MYTAPE5 *****
COMMON/MYTAPE5/INUNT,JTIN,LCUT,KTAPEOUT,KINCARD5
CEND
CUSE
  DATA (JTIN=1),(LCUT=6),(KTAPEOUT=7),(KINCARD5=8)
  LTN 1 IS THE INPUT DATA TAPE
  LTN 2 IS RESERVED FOR ADDING DATA FROM TAPE
  LTN 3 IS RESERVED FOR ADDING DATA FROM TAPE
  LTN 4 IS RESERVED FOR ADDING DATA FROM TAPE
  LTN 5 IS RESERVED FOR ADDING DATA FROM TAPE
  LTN 6 IS THE OUTPUT DATA TAPE
  LTN 7 IS THE QUICK DATA BASE TAPE
  LTN 8 IS RESERVED FOR SEQUENCE CHECKING OF CONTROL CARDS
  LTN 9 IS RESERVED FOR WHILING OUT ERROR MESSAGES
COMMON/NEWSET START *****
CEND
CUSE
  NEWSET *****
  NEWSET *****
  DATA (NEWSET = 0)
COMMON/NCDESIGS START *****
CEND
CUSE
  NCDESIGS *****
  NCDESIGS *****
COMMON/NCERRORS/NCERRORS,NAMEOF,MRPHONE,IVANTBU
CEND
CUSE
  NCERRORS *****
  NCERRORS *****
COMMON/NCPRINT START *****
CEND
CUSE
  NCPRINT *****
  NCPRINT *****
  NCTEST START *****

```


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```

COMMON/NGTEST/NGTEST
CEND
CUSE
  NGTEST *****
  PRIPT START *****
COMMON/PRIPT/MPRIPT
CEND
CUSE
  PRIPT *****
  SETIDD START *****
COMMON/SETIDD/ID(50),INDEX,JINDEX,IAUTC
CEND
CUSE
  SETIDD *****
  TWCRD START *****
COMMON/TWCRD/TWCRD,ITWCRD
EQUIVALENCE (TWCRD,ITWCRD)
CEND
  TWCRD *****
  DATA(NDIMD(1)=0),(NDIMLIST=2000)
  DATA(KKSET=1)
  DATA(IFIRST=1)
  DATA (NDESIGNS = 0.0),(KKMIN = 1.101)
  DATA (MPRIPT=0)
  DATA(NDEFINE = 1),(NUNDEF = 1)
  IDEF=0
  LASTLIST=0
  LCCP TO CLEAN DIRECTORY
  DC 1 I=1,NDIMD(1)
  ATTNAM(1)=0
  IFCMAT(1)=0
  ICDE(1)=0
  IDEFALT(1)=0
  N1(1)=0
  N2(1)=0
  LISTCHK(1)=0
  GLC8(1)=0
  1 CONTINUE
  2 LISTVALS(1)=0
  END

```

C

5.475 INITFAST

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EO

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4

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

IDENT INITFAST

INITFAST	00055
DIMELIMY	00004
ENKCRM	11054
ICKTST	00002
ICONROL	00001
IOESIGS	00001
IGNUSET	00001
IIP	00001
IISTUFF	00070
INSIDE	00002
IOESTEST	00001
KASEI	00001
MPHTOPT	00001
MYGGGUS	00004
MYIDENT	00001
MYINPUT	00012
MYOUT	00012
MYPRANT	00003
MYTAPES	00005
NEWSET	00001
NGDESIGS	00004
NGERMCHS	00004
NGPRINT	00001
NOTEST	00001
PRISPT	00001
SETIDU	00065
TICRD	00001

EXTERNAL SYMBOLS

Q3J10040
Q8001CT.

5.ATS

INITFAST

CU0004	ATTNAME	00020	00021		
PU0047	BEGIN.	0005C			
P00053	COUNT.	00016	00017	000*1	000*2
C02740	UEFAULT				
CU0372	DESIGNC				
P00001	DICT.	00006			
P00051	ENDING.	00007	00046	000*7	
PU0000	EXIT.	00052			
C03724	FN1				
CU04710	FN2				
CU05714	GLCB	00033			
PU0054	I	00013	00017	00036	000*1
CU0004	IAUTC				
CU0000	ICKTST				
CU1754	ICDDE	00023			
CU0000	ICDM				
CU0000	IE				
CU0000	IDEF	0001C	00011		
CU2740	IDEFAULT	00024			
CU0000	IDESIGS				
CU0000	IENDSET	00003			
CU0001	IERS*	CG0001			
PU0003	IFIRST				
CU0770	IFCP	00022			
CU0002	INDE				
P00004	INITFAST	00004			
P00047	INITIAL.	00007			
CU0000	INSTUFF				
CU0000	INUNIT				
CU0001	ISET	00003			
CU0000	ISTAR	00003			
CU0000	ITP				
CU0000	ITSTUFF				
CU0000	ITWCHD				
CU0003	IWANTBU				
CU0000	IWSIDE				
P00034	*1	00003			
P00043	*2				
CU0000	JUESTEST				
CU0000	JERR	00003			
CU0003	JNDEX				
CU0002	JSET	00003			
CU0001	JTIN	00003			
CU0004	KINCARDS	CU0004			
CU0002	KMIN	CU0002			
CU0000	KKSET	00003			
CU0003	KTAPECUT	CU0003			
CU0001	LASTLIST	00012			
CU0674	LISTCHK	00030			
CU05734	LISTVALS	00043			
CU05674	LSG1		00044		
CU05714	LSG2				
CU0002	LSJT	CU0002			
CU0000	MPRTCPT	00003			

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CU0000	MYIDENT				
CU3724	N1	00025			
CU0710	N2	00026			
CU0001	NAMECF				
CU0001	NDEFINE	00004			
CU0002	NDIMDIK	00003	00014	00014	
CU0003	NIMLIST	00003	00036	00037	
CU0003	NE#DATE				
CU0000	NE#SET	00003			
CU0000	NLINE				
CU0000	NDESTGS	00004			
CU0000	NCEMCHS				
CU0000	NCPRIAT				
CU0000	NOTEST				
CU0000	NPRCPT	00004			
CU0002	NRPACAE				
CU0002	NUNDEF	00002			
CU0000	CUTSTUFF				
KU0001	Q3G1QC40	00027	00032	00005	
KU0002	Q8BDICT.	00000			
P00035	TS00001.	00015			
P00046	TS00002.	00040			
CU0000	T#CRD				
P00020	WS00001.	00034			
P00043	WS00002.	00045			
	00117 SYMBOLS				

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```

SUBROUTINE INPRICL
  CSUHR INPRICL START *****
  CUSE SETIUD START *****
  CENU COMMON/SETIUD/10(SU),INDEX,JNUEX,IAUTC *****
  CUSE SETIUD *****
  CENU ICKTST START *****
  CUSE COMMON/ICKTST/ICKTST *****
  CENU ICKTST *****
  ICKTST = 0
  10 READ 1, IEMP
  PRINT 14, IEMP
  C CHECK INPUT CARD TO SEE IF ALL SETS ARE REQUESTED
  IF (IEMP.EQ.3HALL) 6,9
  C CHECK INPUT CARD TO SEE IF SET CARDS ARE TO BE READ IN
  9 IF (IEMP.EQ.4HAUTO) 12,13
  12 IAU70=1
  GO TO 1C
  C CHECK INPUT CARD TO SEE IF CHECKING IS REQUESTED
  13 IF (IEMP.EQ.4HCHEC) 11,5
  11 ICKTST = 1
  GO TO 1C
  6 INDEX=9999
  JNUEX=0
  RETURN
  5 ID(1)=NUMGET(IEMP,4)
  C CHECK INPUT CARD TO SEE IF ALL DONE
  IF (ID(1).EQ.9999) 2,3
  2 INDEX=0
  JNUEX=0
  RETURN
  3 DO 8 1=2,50
  LOOP TO READ IN SET NUMBERS
  READ 1, IEMP
  ID(1)=NUMGET(IEMP,4)
  IF (ID(1).EQ.9999) 7,8
  C CHECK TO SEE IF ALL CARDS READ IN
  8 CONTINUE
  7 INDEX=1
  JNUEX=INDEX
  RETURN
  14 FORMAT(A4)
  PRINT(14,4)
  END

```

S-4TS INPHTCL

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

INPHTCL

SETJDD
ICATST

EXTERNAL SYMBOLS

THEND.
Q88DICT.
NUMGET
TSM.
STM.
QNSINGL.

IDENT

00130
00015

00065
00001

INPHTCL

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5.4TS INPHICL

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PU0123 BEGIN.
 PU0122 CNVRTI.
 PU0003 CRFMT.
 PU0001 DICT.
 PU0124 ENDING.
 PU0000 EXIT.
 PU0003 FCRMT.
 PU0034 GG00000.
 PU0044 GG000001.
 PU0104 GG000002.
 PU0126 I
 CU0064 IATC
 CU0000 ICKTST
 CU0000 ID
 PU0127 IEMP
 CU0062 INDEX
 PU0123 INITIAL.
 PU0015 INPRCL
 PU0024 .10
 PU0055 .11
 PU0051 .12
 PU0053 .13
 PU0067 .2
 PU0072 .3
 PU0062 .5
 PU0057 .6
 PU0115 .7
 PU0113 .8
 PU0047 .9
 PU0003 .100000
 PU0006 .1
 PU0004 .100001
 PU0005 .100002
 PU0011 .14
 CU0063 JINDEX
 XU0003 NUMGET
 XU0002 QRODICI.
 XU0006 UNSINGL.
 XU0005 STM.
 XU0001 TMEND.
 XU0004 TSH.
 PU0074 WSO0001.
 WSO052 SYMBGLS

UU123
 UU030
 UU121
 UU017
 UU020
 UU124
 UU044
 UU024
 UU034
 UU074
 UU073
 UU021
 UU023
 UU065
 UU031
 UU057
 UU020
 UU015
 UU052
 UU050
 UU066
 UU054
 UU046
 UU112
 UU111
 UU045
 UU045
 UU027
 UU050
 UU054
 UU037
 UU001
 UU062
 UU000
 UU121
 UU035
 UU032
 CU025
 UU114

UU041
 UU100
 UU026
 UU033
 UU071
 UU061
 UU047
 UU053
 UU013
 UU051
 UU055
 UU056
 UU110
 UU044
 UU067
 UU015
 UU052
 UU056

UU043
 UU063
 UU076
 UU103
 UU105
 UU053
 UU064
 UU101
 UU106
 UU116
 UU117
 UU047
 UU070

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```

      FUNCTION IPRINT(I)
      CSUBR      IPRINT      START
      CUSE      SETID0      START
      CEND      CC=CN/SETID0/ID(50),INDEX,JNDEX,IAUT0
      C          SETID0 *****
      C          IPRINT=1,PRINT,IPRINT=0, NC PRINT,IAUT0=1,AUTOPRINT.
      C          INDEX=9999*PRINT ALL,INDEX=0,NC PRINT.
      C          IF (INDEX.EQ.9999) 1,2
      C          1 IPRINT=1
      C          RETURN
      C          CHECK AUTO PRINT SWITCH
      C          2 IF (IAUT0.EQ. 1) 3,4
      C          CHECK TO SE IF INDEX HAS BEEN SET
      C          4 IF (INDEX.EQ. 0) 5,6
      C          5 IPRINT=0
      C          RETURN
      C          6 IPRINT=ILOOK(INDEX,I)
      C          RETURN
      C          3 IPRINT=ILOOK(JNDEX,I)
      C          RETURN
      C          END

```

1000
39000
2000
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
13000
14000
15000
16000
17000
18000

S.4TS IPRINT

PROGRAM LENGTH
ENTRY PCINTS
BLOCK NAMES

IPRINT

EXTERNAL SYMBOLS

QUADICT.
BLOCK

IDENT

00070
00003

00065

IPRINT

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ED 0

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2

P00035 BEGIN.	00051	00060	00064	00040	00033	00035	00036	00037	00037
P00001 DICT.	00005	00023	00030	00040	00033				
P00032 ENDING.	00006	00012	00021	00026					
P00000 EXIT.	00056								
P00024 FP00001.	00047								
P00031 FP00002.	00050								
P00067 GETPL.	00042								
P00057 GETPU.	00045	00063							
P00003 I	00024	00031							
C00064 IATC	00013	00013							
C00000 ID									
X00002 ILCK	00022	00027	00016	00016	00024				
C00062 INDEX	00007	00007							
P00035 INITIAL.	00006								
P00003 IPRINT	00003								
P00011 .1									
P00013 .2	00010								
P00027 .3	00015								
P00016 .4	00014								
P00020 .5									
P00022 .6	00017								
C00063 JNDX	00031								
P00051 PF00002.	00046								
X00001 ORDDICT.	00000	00004							
P00034 VALUE.	00012	00021	00025	00032	00055				

00031 SYMBOLS

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```

SUBROUTINE MAKEBAS
  CSUBR      MAKEBAS  START *****
  CUSE      MYIDENT  START *****
  CEN0      COMMON/ MYIDENT *****
  CUSE      MYIDENT *****
  CEN0      TWCOR0  START *****
  CUSE      TWCOR0 *****
  CEN0      COMMON/TWCOR0/TWCOR0,ITWCOR0 *****
  CUSE      EQUIVALENCE (TWCOR0,ITWCOR0) *****
  CEN0      TWCOR0 *****
  CUSE      ITP *****
  CEN0      COMMON/ITP/ITP *****
  CUSE      ITP *****
  CEN0      ERORCR0  START *****
  CUSE      ERORCR0 *****
  CEN0      COMMON/ERORCR0/JERR,IERS *****
  CUSE      ICKTST  START *****
  CEN0      ICKTST *****
  CUSE      COMMON/ICKTST/ICKTST *****
  CEN0      ICKTST *****
  CUSE      OPTIONS  START *****
  CEN0      COMMON / OPTIONS/ NCON(4),INTAPE,NOUT1,NOUT2,NPR,NUM,NOPSET *****
  CUSE      1 * ISETSI *****
  CEN0      OPTIONS *****
  CUSE      HIST *****
  CEN0      COMMON/HIST/NOPSUSD(10), NUSED *****
  CUSE      HIST *****
  CEN0      LOGFLAG  START *****
  CUSE      COMMON/LOGFLAG/LAST,ICNI,TAPEIN,IADD,DEL,REPUT,ADUIT,JERRCR *****
  CEN0      TYPE LOGICAL LAST,ICNI,TAPEIN,IADD,DEL,REPUT,ADUIT,ICRRCR *****
  CUSE      LOGFLAG *****
  CEN0      NOPRINT  START *****
  CUSE      COMMON/NOPRINT/NOPRINT *****
  CEN0      NOPRINT *****
  CUSE      MYTAPES  START *****
  CEN0      COMMON/MTAPES/JUNIT,JTIN,LCUT,KTAPECUT,KINCARDS *****
  CUSE      MYTAPES *****
  CEN0      DIMENSION NEHRS(10) *****
  CEN0      INTAPE=6 *****
  CEN0      CHECK TO SEE IF INPUT IS FROM SETID RUN *****
  CEN0      IF (NUSED .LE. 0) GO TO 1 *****
  CEN0      IF (NOPSUSD(NUSED) .EQ. 8)MSETID *****
  CEN0      1 CALL INITFAST *****
  CEN0      NGUT = 7 *****
  CEN0      JUNIT = INTAPE *****
  CEN0      CALL ALLOCIN *****
  CEN0      NOPRINT = 1 *****
  CEN0      MYIDENT = 8HBUKBASE *****
  CEN0      CALL INITAP *****
  CEN0      MYIDENT = 8HUALAUB *****
  CEN0      ITP = INTAPE *****
  CEN0      CALL SETREAD *****
  CEN0      MYIDENT = 8HSCMATCH *****
  CEN0      KINCARDS = ITP = 10 *****
  CEN0      CALL SETWHIT *****
  CEN0      ITP = 1C *****
  CEN0      DC 2 I = 1, 10 *****
  CEN0      ITWCOR0 = 6HLAST *****

```

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```

2  CALL NWCRU
   ITP = 10
   CALL TERMTAP
   JERR = 9
   ITP = 9
   MYIDENT = BMSCHATCH
   CALL SETPR11
   MYIDENT = BMSCHATCH
   LCUT = 2
   ITP = 2
   CALL SETPR11
   CALL NEWDATA
   ICNT = 1
   LAST = 1
   CALL NENDIR
   MYIDENT = BMUUKUB
   CALL WRITEDIR(NGUT)
   ICNT = 1
   LAST = 1
   CALL NEWBASE(NGUT)
   CALL ENDDATA(NGUT)
   ITP = 9
   CHECK TO SEE IF ERRORS ARE TO BE SAVED
   IF ( NCON(3) .EQ. BMNGCHECK ) GO TO 35
   ITWORD = 8HALLOWNE
   UC 31 I = 1, 20
   CALL WACHD
   31 CONTINUE
   35 CONTINUE
   CALL TERMTAP
   CHECK TO SEE IF PRINTS OF BASE WERE REQUESTED
   IF ( NCON(4) .EQ. 8MPRNBASE.CR.NCON(5) .EQ. 8MPRNBASE )
   ICALL PRNTBASE(NGUT)
   IF ( NCON(4) .EQ. 8MPRNTDATA.CR.NCON(5) .EQ. 8MPRNTDATA )
   ICALL PRNTDATA(NGUT)
   CHECK TO SEE IF ERRORS ARE TO BE PRINTED
   3 IF ( NCON(3) .EQ. BMNGCHECK ) GO TO 10
   CONTINUE
   ITP = JERR
   MYIDENT = BMSCHATCH
   CALL SETREAD
   30 NUMJERR = 10000
   LOOP TO PRINT ERROR MESSAGES
   UC 20 I = 1, NUMJERR
   CALL RDARNAY(NEWS*10)
   IF ( NEWS(I) .EQ. 8HALLOWNE ) GO TO 21
   PRINT 300, NEWS
   300 FORMAT( 1X, 3H***, 2X, 10A8 )
   20 CONTINUE
   GO TO 30
   21 NE = I / 2
   PRINT 301, NE
   301 FORMAT( 2X, 16, * ERRORS ON QUIKDBG RUN * )
   ITP = 9
   CALL TERMTAP
   10 CONTINUE

```

FIN5.5

RETURN
END

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89000
90000

IDENT MAKEBAS

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

MAKEBAS
MYIDENT
TWGRU
IIP
ENRCHM
ICKTST
OPTIONS
MIST
LOGFLAG
NSPRINT
MYTAPES

0035:
00055
00001
00001
00001
00002
00001
00017
00013
00010
00001
00005

EXTERNAL SYMBOLS

QJQ1004C
TREADS
QDDUCT.
INITFAST
ALGCUIM
INITAP
SETREAD
SETMAY
MMCMO
TERMIAP
NEWDATA
NEWDM
WHITGIR
NEWBASE
ENDATA
PHNICASE
PHNUATA
ROADWAY
SIM.
SLC.
UNSLINGL.

5.415

MAKEBAS

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ED 0

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5

CO0006 ADDIT	00101								
X00005 ALCCDIN	00341								
P00341 BEGIN.	00327								
P00340 CNVRTI.	00314	00332							
P00015 CRFMI.									
CO0004 DEL									
P00001 DICT.									
	00057	00074	00102	00110	00116	00125	00135	00143	00152
	00173	00177	00210	00213	00230	00234	00244	00255	00270
	00310	00313	00325	00331	00335				00304
	00212								
X00017 FMDATA	00060	00330							
P00342 ENDING.	00342								
P00000 EXIT.	00066	00105	00111	00117	00130	00147	00153	00174	00217
P00015 FGRMAT.	00246	00257	00265	00277					00223
	00302								00235
P00314 G500000.	00323								
P00332 G600001.	00131	00136	00226	00231	00273	00314	00320		
P00345 I									
CO0003 IADD	00166	00203							
CO0000 ICTST									
CO0001 ICNT									
CO0007 IERROR									
CO0001 IERSH									
P00240 IF00001.									
P00251 IF00002.									
X00006 INITAP	00107								
X00004 INITFAST	00073								
P00341 INITIAL.	00060								
CO0010 INTAPE	00061								
CO0000 INUNIT		00062	00071	00072	00076	00077	00113	00113	
CO0010 ISETSLZ									
CO0000 ITP									
	00114	00114	00121	00122	00126	00127	00140	00141	00146
	00157	00215	00216	00264	00264	00332	00333		00157
	00133	00133	00224	00224					
	00065								
	00262								
	00064								
	00064								
	00070								
	00221								
	00237								
	00242								
	00250								
	00253								
	00261								
	00300								
	00301								
	00317								
	00314								
	00320								
	00257								
	00271								

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X00007	SETHEAD	00115	00267	00160
X00010	SETWRIT	00124	00151	
X00024	SLC.	00307		
X00023	STH.	00303	00324	
C00002	TAPEIN			
X00012	TERHTAP	00142	00233	00334
X00002	THEND.	00312	00330	
P00315	TS00003.	00273		
C00000	TMCRD			
X00015	WRITEDIR	00176		
X00011	WRMCRD	00134	00227	
P00132	WS00001.	00137		
P00227	WS00002.	00232		
P00274	WS00003.	00316	00316	
	00164 SYNDCLS			

SATS MAKEIT

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

MAKEIT

STDECC
JDESEST
MYIDENT
DIRRECTRY

EXTERNAL SYMBOLS

QDDICT.
NEWDIR
WHITEOIR
ITL
NEWPAGE
ENDDATA

IOENT

U0102
U0006

U0001
U0001
U0001
11954

MAKEIT

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3

CU0004	ATTNAME	UU025	UU034				
PU0046	BEGIN.	UU063	UU071	UU075			
CU2740	DEFAULT						
PU0001	DICT.	UU01C	UU013	UU017	UU024	UU033	UU040
XU0006	ENDDATA	UU042					
PU0064	ENDING.	UU011	UU045	UU046	UU047	UU050	UU052
PU0000	EXIT.	UU067					
CU3724	FN1						
CU4710	FN2		UU021	UU030			
PU0003	FORMAT.	UU014					
PU0020	FP000C1.	UU060					
PU0041	FP000C2.	UU061					
PU0044	FP000C3.	UU062					
PU0100	GETPL.	UU053					
PU0070	GETPU.	UU056	UU074				
CU5714	GLCB						
CU1754	ICODE						
CU0000	IDEF	CU026	UU035				
CU2740	IDEFAULT						
CU0770	IFORMAT						
PU0046	INITIAL.	UU011					
XU0004	ITL	UU023	UU032				
CU0000	IXSO	UU036	UU036				
PU0003	..100C00	UU014					
PU0004	..100C01	UU021					
PU0005	..100C02	UU030					
CU0000	JUESTEST	UU027	UU027				
PU0101	JJJ	UU022	UU025	UU031	UU034		
CU0001	LASTLIST						
CU5674	LISTCHER						
CU5734	LISTVALS						
CU5674	LOG1						
CU5714	LOG2						
PU0006	MAKEIT	UU006					
CU0000	MYIDENT	UU015	UU015				
CU3724	N1						
CU4710	N2						
CU0002	NDIMDIR						
CU0003	NDIMLIST						
XU0005	NEWBASE	UU037					
XU0002	NEWDIR	UU012					
PU0003	NT1	UU020					
PU0063	PF00002.	UU057	UU041	UU044			
XU0001	QBQDICT.	UU000	UU007				
XU0003	WRITEDIR	UU016					
UU0055	SYMBCLS						

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```

SUBROUTINE MOVE11(INSTUFF)
  C*** SUBROUTINE MOVE11 MOVES RECORDS FROM THE INPUT BUFFER AREAS
  CUSE *****
  CEND *****
  C*** COMMON/ERRORDM/JERR, IJERR
  C*** TO THE OUTPUT BUFFER AREA, ADDS THE NEW SET NUMBER AND
  C*** LINE NUMBER AND ADDS THE DATE OF THE UPDATE WHEN APPLICABLE
  C*** COMMON/MYCUT/OUTSTUFF(10)
  CUSE MYINPUT START *****
  CEND *****
  C*** COMMON/MYINPUT/INSTUFF(10)
  CUSE MYINPUT *****
  CEND *****
  C*** MYGCODES START *****
  C*** COMMON/MYGCODES/INLINE, ISET, IJSET, NEWDATE
  C*** MYGCODES *****
  CEND *****
  C*** TYPE INTEGER OUTSTUFF
  C*** NLINE IS THE INDEX OF THE LINE NUMBER WITHIN THE CURRENT SET
  C*** NLINE=NLINE+1
  C*** GO TO (20,30), IJSET
  C*** ISET IS THE INDEX OF THE NEW SET
  C*** ISET=ISET
  C*** LOOP TO MOVE UPDATE CARD
  C*** DO 21 I=1,8
  C*** THE ARRAY INSTUFF IS SET ASIDE FOR NEW DATA COMING
  C*** FROM CARD ON TAPE, THE ARRAY OUTSTUFF CONTAINS THE DATA
  C*** FOR TRANSFER TO NEWBASE AND NEWDIR TO BUILD THE QUICK
  C*** DATABASE, FOR TRANSFER TO THE PRINT ROUTINE, CUT, AND FOR
  C*** OUTPUT TO THE UPDATED DATATAPE, LOUT
  C*** OUTSTUFF(1)=INSTUFF(1)
  C*** ENTER DATE OF UPDATE
  C*** OUTSTUFF(10)=NEWDATE
  C*** ENTER THE CURRENT SET NUMBER, JSET, AND LINE NUMBER, NLINE
  C*** IF (NLINE .LT. 9999) GO TO 10
  C*** NLINE = 9999
  C*** ENCODE(8,400,OUTSTUFF(9)) JSET, NLINE
  C*** ITP = JERR
  C*** LOOP TO WRITE OUT ERROR MESSAGE
  C*** DO 11 I = 1, 5
  C*** ITHWORD = BMSET TOO
  C*** CALL WRHWORD
  C*** ITHWORD = BM LARG
  C*** 11 CALL WRHWORD
  C*** CALL WRHARRAY(OUTSTUFF, 10)
  C*** RETURN
  C*** 10 ENCODE(8, 400, OUTSTUFF(9)) JSET, NLINE
  C*** 400 FORMAT(2I4)
  C*** RETURN
  C*** END

```

5.4TS

MCVEIT

PROGRAM LENGTH-
ENTRY POINTS
BLOCK NAMES

MCVEIT

ENRORM

MYCUI

MYINPUT

MYGCUUS

EXTERNAL SYMBOLS

THEND.

GBDDICT.

WHWGRU

WHARRAY

ENC.

QNSINGL.

IDENT

U0144

U0010

U0002

U0012

U0012

U0004

MCVEIT

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P00105 BEGIN.	00121	00127	00133				
P00104 CNVRT1.	00045	00046	00076	00077			
P00003 CRFMI.	00102						
P00001 DICT.	00012	00043	00050	00057	00062	00066	00101 00110 00111
X00005 ENC.	00042	00072					
P00122 ENDING.	00013	00070	00102	00105	00106	00107	00107
P00000 EXIT.	00125						
P00003 FORMAT.	00053	00060					
P00016 FPO00C1.	00117	00120					
P00136 GETPL.	00112						
P00126 GETPU.	00115	00132					
P00051 G0000C0.	00041						
P00102 G0000C1.	00071						
P00140 I	00024	00025	00053	00063			
C00001 IERSW							
P00141 IGCTC.	00017						
P00003 IMCMIC	00016						
P00105 INITIAL.	00013						
C00000 INSTUFF	00026						
C00001 ISET	00022						
P00142 IIP	00052						
P00143 ITMCHD	00055	00060					
P00071 .10	00036						
P00036 .1000C1							
P00037 .1000C2	00034	00035					
P00061 .11							
P00022 .20	00020						
P00026 .21							
P00033 .30	00021						
P00003 .1000C0	00054						
P00004 .1000C1	00060						
P00005 .400	00044						
C00000 JERR	00051						
C00002 JSET	00023						
P00110 MOVEIT	0001C			00075			
C00003 NEWDATE	00031						
C00000 NLINE	00014						
C00000 CUTSTUFF	00027						
P00121 PFO00C2.	00116						
X00002 Q000ICT.	00000						
X00006 QNSINGL.	00103						
X00001 TMEND.	00047						
X00004 WARMAY	00065						
X00003 WRMCHD	00056						
P00026 W5000C1.	0003C						
P00054 W5000C2.	0003C						
	00074						
	00037						
	00033						
	00032						
	00044						
	00046						
	00077						

00056 SYMBOLS

```

SUBROUTINE NEWBASE(NTJ)
  NEWBASE 20SEP71 *****
  SIDECC  START *****
  COMMON / SIDECC / IXSO *****
  SIDECC *****
  EQUIVALENCE( LISTCHK,LISTCHK) *****
  C      HEAD CARDS AND OUTPUT TO DATA FILE ON TAPE NTL. ASSUMES *****
  C      TAPEHANDLER SET TO WRATE. *****
  CUSE *****
  COMMON/MYGOCUS/NTLINE,NTSET,NTJSET,NEWDATE *****
  COMMON/ MYGOCUS *****
  CUSE *****
  CUSE *****
  COMMON/KKSET/KKSET *****
  CUSE *****
  CUSE *****
  JOESTEST START *****
  COMMON/JOESTEST/JOESTEST *****
  JOESTEST *****
  PRIOPT START *****
  COMMON/PRIOPT/PRIOPT *****
  CUSE *****
  DATA (NPKOPT=0) *****
  COMMON/DIRECTRY/IDF,LASTLIST,NDIMDIR,NDIMLIST,ATTNAME(500),
1  IFORMAT(500),LCUE(500),IDEFAULT(500),IDEFAULT(500),
2  N1(500),FN1(500),N2(500),FN2(500),LISTCHK(500),
3  GLOB(500),LISTVALS(2000) *****
  EQUIVALENCE(N1,FN1),(N2,FN2),(IDEFAULT,IDEFAULT) *****
  TYPE LOGICAL LISTCHK,GLOB *****
  TYPE INTEGER ATTNAME *****
  EQUIVALENCE(LGGL,LISTCHK),(LGGL,GLOB) *****
  DATA(NDIMDIR=500),(NDIMLIST=2000) *****
  C      IDEF = INDEX OF LAST DEFINED ATTRIBUTE IN TABLES *****
  C      LASTLIST = INDEX OF LAST ENTRY IN LISTVALS *****
  C      LISTCHK = TRUE FOR LIST CHECKING, FALSE FOR RANGE CHECKING *****
  C      GLOB = TRUE WHEN GLOBAL DEFINITION IN FORCE. *****
  C      ATTNAME = BCD NAME OF ATTRIBUTE *****
  C      IFORMAT = INPUT/OUTPUT CONVERSION FOR VALUES(FORTRAN CONV.) *****
  C      ICODE = CODE SPECIFYING TYPE OF VALUES *****
  C      DEFAULT = UNDEFINED VALUE FOR ATTRIBUTE *****
  C      N1 = LOWEST LEGAL VALUE(RANGE CHECK) OR INDEX IN LISTVALS *****
  C      N2 = HIGHEST LEGAL VALUE(RANGE CHECK) OR INDEX IN LISTVALS *****
  C      OF BEGIN OF LIST OF ALLOWED(LIST CHECK) *****
  C      OF END OF ALLOWED LIST(LIST CHECK) *****
  C      LISTVALS = CONTAINS ALLOWABLE VALUES FOR LIST CHECKING *****
  CUSE *****
  IENDSET START *****
  COMMON/IENDSET/IENDSET *****
  CUSE *****
  ITP *****
  COMMON/ITP/ITP *****
  CUSE *****
  ITP *****
  TWORD *****
  COMMON/TWORD/TWORD,IT*CHD *****
  EQUIVALENCE (T*CHD,IT*CHD) *****
  CUSE *****
  TWCRU *****
  CUSE *****
  NCTEST *****
  COMMON/NCTEST/NCTEST *****
  CUSE *****
  NCTEST *****

```



```

CUSE      ERMCRW      START *****
COMMON/ERRCRW/JERR,IERSW *****
CEND      ERMCRW *****
CUSE      ICCATROL      START *****
COMMON/ICATROL/ICOM *****
CEND      ICCATROL *****
COMMON/ICUT/ICUTSTUFF(10) *****
DIMENSION NEACH(8) *****
DIMENSION NX(10) *****
EQUIVALENCE (ICUTSTUFF,NX) *****
TYPE INTEGER ICUTSTUFF *****
JERR      = ERMCRW OUTPUT MEDIUM *****
IERSW     = 0 IF NO ERRORS, 1 IF ANY. *****
DIMENSION NFORM(3) *****
DATA(NFORM)=10,10,10 *****
DIMENSION JATI(200),JVAL(200) *****
EQUIVALENCE (NVAL,NVAL) *****
DATA (NCON=7777777777777777) *****
DATA (NCON=500000000000000000) *****
COMMON/XYZ/AMIN,APAX *****
CLEAR GLOBAL DEFINITION INDICATORS *****
DO 10 I=1,1DEF *****
10 GLOB(I)=0 *****
C*** CALL NEWCARDS FOR NEW CARD IMAGE *****
20 CALL NEWCARDS *****
C CHECK TO SEE IF SET JUST ENDED *****
22 IF (IENDSET)70,221 *****
221 GO TO (50+25*QU,70,23),ICOM *****
23 IERSW=2 *****
ITP = 9 *****
C LOOP TO MAKE ERMCR MESSAGE *****
DO 24 I = 1,5 *****
ITWCRD = RM ERROR *****
CALL WRMCRD *****
ITWCRD = RMNEWBASE *****
24 CALL WRMCRD *****
CALL WRARRAY(NX,10) *****
GO TO 2C *****
C HERE DEFINE *****
25 I=2 *****
C CHECK FOR DONE *****
26 IF (NX(I) .EQ. 10)20,27 *****
C CONVERT AND CHECK ATTRIBUTE AND VALUE *****
27 ASSIGN 28 TO NCHK *****
GO TO 130 *****
C CHECK TO SEE IF ERROR IS DATA *****
28 IF (KERR)30,29 *****
C OUTPUT GLOBAL SIGNAL *****
29 ITP=NTI *****
ITWCRD=1 *****
CALL WRMCRD *****
OUTPUT ATTRIBUTE INDEX *****
ITWCRD=J *****
CALL WRMCRD *****
OUTPUT ATTRIBUTE VALUE *****
ITWCRD=NVAL *****

```

```

CALL WRWORD
GLCB(J)=1
ASSIGN 30 TO MKCHK
GC TO 1000
C
C ADVANCE CARD FIELD
C I=1+2
C CHECK TO SEE IF CARD EXHAUSTED
C IF (I .GT. 7) 20+25
C END DEFINE PROCESSING
C HERE UNDEFINE
C I=2
C CHECK FOR DONE
C IF (NX(I) .EQ. 1H ) 20+42
C LOCK UP ATTRIBUTE
C J=TITLE(NX(I),ATTNAME,IDEF)
C IF (J) 43,43,44
C CHECK TO SEE IF ATTRIBUTE KNOWN
C SIGNAL UNDEFINED ATTRIBUTE IF CANT FIND
C ASSIGN 45 TO NAT
C GC TO 110
C HERE FOUND ATTRIBUTE *EMIT UNDEFINE SIGNAL
C
C ITP=NT:
C ITWORD=-2
C CALL WRWORD
C OUTPUT ATTRIBUTE INDEX
C ITWORD=J
C CALL WRWORD
C OUTPUT DEFAULT VALUE
C ITWORD=IDEFAULT(J)
C CALL WRWORD
C GLCB(J)=0
C ADVANCE CARD FIELD
C ASSIGN 45 TO MKCHK
C GC T C 1000
C
C I=1+1
C CHECK TO SEE IF CARD EXHAUSTED
C IF (I .GT. 8) 20+41
C END UNDEFINE PROCESSING
C HERE PROCESS ITEM
C
C I=2
C N2=0
C ASSIGN 52 TO NCHEK
C CHECK AND CONVERT ATTRIBUTE VALUE PAIR
C 51 IF (NX(I) .EQ. 1H ) 5555,130
C 5555 GC TO 55
C CHECK TO SEE IF DATA ERROR
C 52 IF (KERR) 54,53
C 53 N2=N2+1
C JATT(N2)=J
C JVAL(N2)=NVAL
C ADVANCE CARD FIELD
C ASSIGN 54 TO MKCHK
C GC TO 1000
C
C I=1+2
C CHECK TO SEE IF CARD EXHAUSTED
C IF (I .GT. 7) 55,51

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88000
89000
89100
89200
90000
91000
92000
93000
94000
95000
96000
97000
98000
99000
100000
101000
102000
103000
104000
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126000
127000
128000
129000
130000
131000
132000
133000
134000
135100
136100
137000

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```

C*** CALL NENCARDS FOR NEXT CARD IMAGE
55 CALL NENCARDS
56 GO TO(58,58,58,58,57),ICOM
C MEME CONTINUE PROCESSING SAME ITEM(NG NEW COMMAND).
57 I=1
   GO TO 51
C MEME ENCOUNTERED NEW COMMAND,OUTPUT CUR ITEM,THEN DO NEW.
58 ITP=NTI
   ITCORD=AZ
   CALL WHORD
   LOOP TO WHITE ATTRIBUTE PAIRS
   DO 59 L=1,NZ
     ITCORD=JATT(L)
     CHECK TO SEE IF THIS ITEM IS A DESIG
     IF(ITCORD.EQ.JUESTEST) 58*6,58*7
58*6 CALL COUNTDS(JVAL(J))
58*7 CONTINUE
     CALL WHORD
     ITCORD=JVAL(L)
59 CALL WHORD
   GO TO 22
C MEME FOR END INPUT, UNDEFINE ALL GLOBAL ATTRIBS,AND EXIT
70 ITP=NTI
   DO 72 I=1,IDEF
     IF(IGLOB(I))71,72
71 ITCORD=2
   CALL WHORD
   CALL WHORD
   ITCORD=1
   CALL WHORD
   ITCORD=IDEFAULT(I)
   CALL WHORD
72 CONTINUE
C CHECK FOR END SET
7200 IENDSET=0
   GO TO 221
7201 CONTINUE
   RETURN
C LOCAL SUBROUTINE TO CHECK ATTRIBUTE AND
C CONVERT VALUE TO AVAL, KERR 1 IF NO CHECK, EXIT KCHER
130 J=TITLE(IX(I),ATTNAME,IDEF)
C CHECK TO SEE IF ITEM IS SIDE
   IF(J.NE.IXSD) GO TO 134
   KKSET = 1
C CHECK TO SEE IF SIDE IS RED
   IF(IX(I,1).EQ.3HRED) KKSET = 2
134 CONTINUE
   KERR=0
C CHECK TO SEE IF ATTRIBUTE IN DIRECTORY
   IF(J131,131,133
131 ASSIGN 132 TO NAT
   SIGNAL UNDEFINED ATTRIBUTE ERROR
   GO TO 110
530 CONTINUE
132 KERR=1
540 CONTINUE

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138000
139000
140000
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142000
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190000
191000
192000
193000

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```

136 GC TO NCHECK
C   DECODE AND CHECK VALUE
133 NFORM(2)=IFORMAT(J)
  ASSIGN 132 TO ILLVAL
C   CHECK TO SEE IF LAT-LONG TO BE CORRECTED
  IF (ICODE(J)-7)*760.560.760
560 DECODE(8*561+NX(I+1)) NEACH
561 FORMAT(BR1)
C   LOOP TO CONVERT LAT=LONG
  DO 569 I=1,8
  IF (NEACH(I)) .EQ. 1*- 780.547
547 CONTINUE
  IF (NEACH(I)) .EQ. 1*- 780.571
571 IF (NEACH(I)) .EQ. 1*- CR. NEACH(I) .EQ. 1*
  1. CR. NEACH(I) .GE. 1*1-AND. NEACH(I) .LE. 1*9) 569.562
562 IF (NEACH(I)) .EQ. 1*- CR. NEACH(I) .EQ. 1*2
  1. CR. NEACH(I) .EQ. 1*E. 1*E. CR. NEACH(I) .EQ. 1*W) 563.940
563 IQUAD=NEACH(I)
  IF (I) .EQ. 7) 564.567
564 DECODE(6*565+NX(I+1)) XLO,XLM,XLS
565 FORMAT(3F2.0)
  GC TO 566
567 IF (I) .EQ. 6) 640.940
569 CONTINUE
  GC TO 780
640 DECODE (7*650+NX(I+1)) XLO,XLM,XLS
650 FORMAT (F3.0,F2.0)
566 CONTINUE
  IF (XLS .LT. 0. .CR. XLS .GT. 60.) 940.660
  IF (XLM .LT. 0. .CR. XLM .GT. 60.) 940.670
670 XVAL=XLO,XLM/60.,XLS/3600.
  IF (NX(I)-3*MLAT) 680.760.680
680 IF (NX(I)-4*MLONG) 940.690.940
690 IF (XVAL-180.) 720.720.940
700 IF (IQUAD-1*W) 710.810.710
710 IF (IQUAD-1*E) 940.740.940
720 IF (IQUAD-1*E) 730.750.730
730 IF (IQUAD-1*W) 940.810.940
740 XVAL=XVAL
  GOTO 810
750 XVAL=360.-XVAL
  GOTO 810
760 CONTINUE
  IF (NX(I)-1) 5*HBLANK) 760.770.780
770 XVAL=X
  GOTO 790
780 DECODE (8*NFORM+NX(I+1)) NVAL
790 ASSIGN 530 TO ILLVAL
  IC=ICDUE(J)
  GOTO (810,810,800,800,810,810,810,810) IC
800 NVAL=NUNGET(NX(I+1),B)
810 CONTINUE
C   SEE IF RANGE OR LIST CHECK
C   NOTEST-ZERO CHECK - NON ZERO - NO CHECK
C   IF (NOTEST-GT. 0) GC TO 130
C   HERE RANGE CHECK

```

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FTNS.5

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7

IERSW = 2
ITP = JERN
ITWCRD = RM *****
CALL WRRCHD
UC 1021 I = 1, 3
ITWCRD = RM MAXKILL-
CALL WRRCHD
ITWCRD = RM MINKILL
CALL WRRCHD
ITWCRD = RM ERNGH
CALL WRRCHD
1021 CONTINUE
CALL WRRRAY (NA, 10)
GO TO MPKCHK
END

290160
290170
290180
290190
290200
290210
290220
290230
290240
290250
290260
290270
290280
290290
291000

SATS NEWBASE

PROGRAM LENGTH-
ENTRY POINTS
BLOCK NAMES

NEWBASE

SIDECC
MYGSDS
KASEI
JDESTEST
PHYOPT
DIAGETRY
IENDSET
ITP
TWGRU
NGTEST
ERRORM
ICONTROL
MYGUT
XYZ

IDENT

U2101
U0712
U0001
U0004
U0001
U0001
U0001
U0001
11654
U0001
U0001
U0001
U0001
U0002
U0001
U0012
U0002

NEWBASE

EXTERNAL SYMBOLS

Q3U10040
Q3U10040
TREND.
Q3U10040
NEWCARDS
WRWCHD
WRWCHD
ITL
COUNTS
NUMGET
DEC.
SLI.
UN5INGL.

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SATS	NEWBASE	11/24/71	ED	0	PAGE NO.	10
P01425	IF00010.	01423				
P01553	IF00011.	01551				
P01563	IF00012.	01561				
C00770	IFORMAT	01264	01713	01730		
P02056	IGGTC.	01735	01517	01542		
P02057	ILLVAL	01266	01130	01655		
P02060	INE	01307	01310	01316	01327	01344
		01347	01351	01374	01333	01341
P02003	INITIAL.	00715	01371			
P02061	IQUAD.	01350	01454	01462		
C00001	ISET	01451	01457			
X00010	ITL	01231	01700			
C00000	ITP	00743	00777	00777	01137	01173
		01611	01635	01747	01173	01610
C00300	ITWRC	00747	00753	00753	01005	01051
		01052	01056	01063	01141	01162
		01202	01207	01207	01141	01163
		01541	01545	01551	01615	01641
C00000	IXSO	01235	01236	01751	01757	01767
P01657	.1000	01021	01120			
P00724	.10					
P01237	.100001					
P01240	.100002	01236				
P01246	.100003					
P01250	.100004	01245				
P01536	.100005					
P01537	.100006	01534				
P01664	.100007					
P01665	.100008	01663				
P01671	.100009					
P01674	.100010	01670				
P01707	.100011	01705				
P01712	.100012	01706				
P01742	.100013	01740				
P01745	.100014	01741				
P01676	.1001	01664				
P01732	.1002	01731				
P01735	.1003	01731				
P01737	.1004	01734				
P01772	.1021					
P01606	.110	01606				
P01622	.111	01605				
P01633	.120					
P01646	.121	01255				
P01627	.130	01107				
P01654	.131	01252				
P01656	.132	01254				
P01663	.133	01253				
P01250	.134	01237				
P01260	.136	01536				
P01567	.137	01601				
P01602	.138					
P00730	.20	00771	01026	01034	01077	
P00732	.22	01171				

PU0734 .221	01225			
PU0741 .23				
PU0754 .24				
PU0764 .25				
PU0766 .26	00737	01025		
PU0772 .27	01025			
PU0774 .28	00771			
PU0776 .29	00772			
PU1022 .30	00775	01020		
PU1027 .40	00740			
PU1031 .41	01076			
PU1034 .42	01034			
PU1035 .43	01043	01044		
PU1045 .44	01044			
PU1047 .45	01045	01071		
PU1100 .50	00736			
PU1104 .51	01124	01135		
PU1111 .52	01102			
PU1250 .530	01513			
PU1113 .53				
PU1260 .540	01523	01546	01555	01565 01566
PU1121 .54	01112	01117		
PU1313 .547	01312			
PU1125 .55	01110			
PU1110 .5555				
PU1272 .560	01270			
PU1127 .56				
PU1333 .562	01326	01331		
PU1347 .563	01335	01340	01343	
PU1353 .564				
PU1414 .566	01370			
PU1371 .567	01352			
PU1374 .569	01320	01323	01331 01332	
PU1134 .57				
PU1316 .571	01315			
PU1136 .58	01131	01132	01133 01133	
PU1152 .5846				
PU1157 .5847	01151			
PU1164 .59				
PU1377 .640	01373			
PU1422 .660	01420	01421		
PU1430 .670	01426	01427		
PU1441 .680	01440	01440		
PU1446 .690	01444			
PU1172 .70	00733	00740		
PU1451 .700	01437			
PU1202 .71	01201			
PU1454 .710	01453			
PU1217 .72	01201			
PU1224 .7200	01223			
PU1457 .720	01447	01450		
PU1420 .7201	01223			
PU1462 .730	01461			
PU1465 .740	01455			

P01467 .750	01460						
P01472 .760	01471						
P01477 .770	01475						
P01501 .780	01315	01475	01476				
P01513 .790	01500						
P01525 .800	01521						
P01533 .810	01463	01466	01520	01523	01524		
P01537 .820							
P01547 .830	01543						
P01557 .840	01544						
P01567 .890	01543	01546					
P01633 .940	01372	01421	01424	01444	01455	01456	01456
	01464	01552	01562				
	01432						
P02043 .ERASEH.	01433						
P00641 .10600	00746						
P00642 .106001	00752						
P00643 .106002	00770						
P00644 .106003	01033						
P00645 .106004	01106						
P00646 .106005	01244						
P00661 .106006	01437						
P00662 .106007	01443						
P00663 .106008	01474						
P00664 .106009	01477						
P00700 .106010	01514						
P00701 .106011	01620						
P00702 .106012	01640						
P00703 .106013	01644						
P00704 .106014	01663						
P00705 .106015	01667						
P00706 .106016	01750						
P00707 .106017	01756						
P00710 .106018	01762						
P00711 .106019	01766						
P00665 .112							
P00647 .561	01277						
P00652 .565	01360						
P00655 .650	01404						
P01041 .200001.	01036						
P01156 .200002.	01153						
P01233 .200003.	01230						
P01531 .200004.	01526						
P01702 .200005.	01677						
P02062 J	01024	01043	01055	01115	01235	01263	01514
	01537	01554	01560	01567	01704	01712	
P00016 JATT	01116						
C00000 JDETEST	01150						
C00000 JERR	01610						
C00002 JSET	01746						
P00326 JVAL	01117	01156	01162				
P02063 K	01574	01602	01613				
P02064 KERR	00774	01251	01257				
C00000 KKSET	01240	01246	01247				
P02065 L	01145	01161	01166				

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NEWBASE

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PU1176 WS000C4.
 PU1310 WS000C5.
 PU1576 WS000C6.
 PU1614 WS000C7.
 PU1640 WS000C10.
 PU1756 WS000C11.
 PU2075 XLD
 PU2076 XLM
 PU2077 XLS
 CU0001 XMAX
 CU0000 XMIN
 PU0036 XNVAL
 PU2100 XTEMP
 00407 SYMBCLS

01221
 01375
 01604
 01625
 01651
 01773
 01362
 01364
 01365
 01736
 01733
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01431
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01425
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01430
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01470 01547 01553
 01476 01466


```

C*** BLANK OUT DATA AREAS IN CORE STORAGE
UC 13 I=1,10
LASTUFF(I)=OUTSTUFF(I)=INCARD(I)=0H
IIP = IC
CALL SETHEAD
RETURN
ENTRY NEWCARDS
NCTFST=IC1ST
C*** SHOULD NEXT CONTROL CARD BE READ IN
310 IF(IICNT) 50,33
33 ICONT=1
IIP = IC
CALL HUAHAY(INCARD*B)
HAS LAST UPDATE CARD BEEN READ
C*** READ NEXT CONTROL CARD
IF(INCARD(I).EQ.4MLAS1) 34,35
34 LAST=1
IIP = IC
CALL TERM1AP
GO TO 46
C*** USES THE CONTROL CARD SPECIFY RECORD DELETIONS
35 IF (INCARD(1) - 0HDELETE) 37, 36, 37
36 DEL=1
C*** WHAT IS THE MAX INDEX FOR RECORD DELETION
MAXDELE=NUMGET(INCARD(4)*8)
GO TO 45
C*** DOES THIS CONTROL CARD SPECIFY A RECORD REPLACEMENT
37 IF (INCARD(1).EQ.7HREPLACE) 38,39
38 REPUT=1
GO TO 45
C*** DOES THIS CONTROL CARD SPECIFY ADDING NEW RECORDS
39 IF (INCARD(1).EQ.8HADDNEW) 40,50
40 IF (INCARD(5).EQ.4HTAPE) 41,4209
C*** CHECK TO SEE IF DATA IS TO BE ADDED FROM INPUT TAPE
41 TAPEIN=1
GO TO 4211
4209 IF (INCARD(5).EQ.8HTAPERUFF) 4210,42
4210 TAPEBUFF=1
C*** ON WHICH LOGICAL TAPE UNIT IS THE NEW DATA
4211 INUNIT=NUMGET(INCARD(6)*8)
IF(INUNIT.LE.4JIN) 4102,4101
4101 IF(INUNIT.GE.4JOUT) 4102,42
4102 PRINT 4103,INUNIT
PRINT 4104,(INCARD(1),I=1,8)
GO TO 77
42 1ADD=1
C*** SHOULD A NEW SET BE STARTED
IF (INCARD(7).EQ.6HNEWSET) 4250,45
4250 NEWSET=NUMGET(INCARD(8)*8)
C*** DETERMINE THE INCOMING SET NUMBER
45 1SET=NUMGET(INCARD(2)*8)
C*** DETERMINE THE INCOMING LINE NUMBER
LINENCS=NUMGET(INCARD(3)*8)
IF (DEL) 46,452
C*** DETERMINE THE DATE FOR THIS UPDATE
452 NEWDATE=INCARD(4)

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451 IF (ADDIT) 46,51
46  ADDIT=0
   GO TO 51
50  IF (ADDIT) 72,51
51  IIP=JFIN
   C
   C  READ NEXT CARD FROM DATADB FILE UNLESS COMMAND IS ADDAFTER.
   C  IN THAT CASE, READ THE CARD ONLY IF THE CARD TO BE ADDED AFTER HAS
   C  NOT YET BEEN PROCESSED BY A REPLACE COMMAND.
   C
   IF (IADD) 59, 59, 57
   JLINE IS A LOCAL VARIABLE WHICH CHANGES ONLY WHEN DATADB IS READ
   MYDBPCS = JSET * 10000 + JLINE
   MYCDBCS = ISET * 10000 + LINENO
   IF (MYCDBCS - MYDBPCS) 5277, 71, 59
   C  READ NEXT CARD FROM DATADB FILE
   C  59 CALL RDARRAY(OUTSTUFF, NMAX)
   DC 590 I = 1, 8
   IF (OUTSTUFF(I) .EQ. 5MISTAT ) OUTSTUFF(I) = 8MTGISTAT
   CONTINUE
   C*** DETERMINE SET AND LINENO FOR THE DATA BASE RECORD
   DECODE(R*500,OUTSTUFF(I)) JSET,JLINE
   500 FORMAT(2I4)
   C*** IS THIS THE START OF A NEW SET
   IF (JSET.EQ.JCLOSET) 512,511
   511 JCLOSET=JSET
   NLINO=0
   IENDSET=1
   IGNORE = 0
   C*** HAVE ALL CONTROL CARDS BEEN READ IN
   512 IF (LAST) 80,510
   C*** CHECK PROPER SET
   510 IF (ISET=JSET) 5277,52,80
   C*** CHECK PROPER LINE NUMBER
   52 IF (LINENO-JLINE) 5277,53,80
   5277 PRINT 5288,JSET,JLINE,ISET,LINENO
   WRITE (4,5288),JSET,JLINE,ISET,LINENO
   CALL ABORT
   C*** LOCAL SUBROUTINE TO DELETE RECORDS
   53 IF (DEL) 54,50
   C*** NUMDEL IS THE NUMBER OF RECORDS TO BE DELETED MINUS 1
   54 NUMDEL=MAXDELE-LINENO
   IF (NUMDEL.LE.0) 5555,55
   55 DC 56 I=DELETE+1,NUMDEL
   56 CALL RDARRAY(OUTSTUFF,NMAX)
   5555 DEL=0
   GO TO 33
   C*** LOCAL SUBROUTINE TO REPLACE CARD IMAGES
   60 IF (REPUT) 61,70
   61 IIF = IC
   CALL RDARRAY(INCARD, 8)
   IF (INCARD(I) .EQ. 4HLAST ) 34, 610
   C*** READ IN REPLACEMENT CARD IMAGE FROM CARD READER
   610 CONTINUE
   C*** MOVE RECORD TO OUTPUT BUFFER
   CALL MOVEIT(I)

```



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C***  IGNORE = LINE#C
      ICNT=REPUT#0
      SET INDICATOR FOR NEW RECORD IN DATA BASE
      ISTAR=1#
      GC TO 801
C***  LOCAL SUBROUTINE TO AUD NEW RECORDS
70  IF(IADD; 71,72
71  IADD#0
   AUDIT#1
      ICNT#C
      IS NEW DATA ON TAPE
      IF(TAPEIN) 710,711B
711B IF(TAPEBUFF; 710, 79
710  ICNT#1
C      CHECK TO SEE IF CARD ALREADY PROCESSED
79  IF (LINE#C - IGNORE) 80, 78, 80
      ALREADY PROCESSED
C 78  IGNORE = C
      RETURN
72  IF(TAPEIN) 73,7322
7322 IF(TAPEBUFF) 710,74
C***  READ IN NEW RECORDS FROM LTN INUNIT
73  READ(INUNIT,700),(INSIUFF(1),1,1,8)
C***  CHECK FOR EOF ON LTN INUNIT
      IF(EOF,INUNIT)77,76
7100 CALL BUFFIT(1,0,0)
      IF(1,0,0) 77,76
74  ICNT#0
75  IF(NEWSET,GT,0) 7710,7660
7710 ISET=NEWSET
      NLINE#0
      IENDSET#1
      NEWSET#C
C***  MOVE RECORD TO OUTPUT BUFFER AREA
7660 CALL MOVEIT(1)
C***  SET INDICATOR FOR NEW RECORD
      ISTAR=1#
      GC TO 801
77  AUDIT#ICNT#TAPEIN#0
      IF(TAPEBUFF) 7795,7794
C***  REMIND LTN INUNIT WHEN ALL ADDITIONS ARE COMPLETE
7794 REMIND INUNIT
7795 ICONE#TAPEBUFF#0
      GC TO 33
C 80  MOVE RECORD TO OUTPUT BUFFER AREA
      CALL MOVEIT(2)
C***  LOCAL SUBROUTINE TO INTERPRET COMMANDS
C***  ICCM#5=UNKNOWN, 1-ITEM,2-DEFINE, 3-UNDEFINE,
C***  4-ENDINPUT
801  CONTINUE
      ICCM#5
      IF(CUTSTUFF(1),EQ,4,NI1EM) 101,102
101  ICCM#1
      GC TO 108
102  IF(CUTSTUFF(1),EQ,6,MOEDEFINE) 103,104
103  ICCM#2

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104 GO TO ICR
105 IF(OUTSTUFF(1).EQ.8)HUNDEFINE) 105,108
106 ICR=3
C*** CHECK FOR PRINT OPTIONS
108 IF(JSET.EQ.ICLOSET182*81
81 ICLOSET=JSET)
109 IJX = ILCORINDEX, JSET)
82 IF( IJX .LE. 0) GO TO 82
83 CALL PAGESKP
84 IF(ISTAR.EQ.1H*) 8310*821
8310 NCTEST=C
C*** GO TO 83
821 IF(IPRINT(JSET))83*84
C*** CALL PRINT SUBROUTINE
83 CALL OUT
1STAR=1H
C*** CHECK FOR END OF DATA IN DATA BASE
84 IF(OUTSTUFF(1).EQ.8)HENDINPUT) 87*85
85 ITP=LCUT
CALL WRARRAY(OUTSTUFF,NMAX)
RETURN
C*** NPIN IS THE INDEX TO FIRST WORD OF RECORD IN OUTPUT BUFFER
87 ICR=4
C*** TERMINATE TAPE HANDLER OPERATIONS ON INPUT AND OUTPUT TAPES
ITP=JFIN
CALL TERTAPE
ITP=LCUT
CALL WRARRAY(OUTSTUFF,NMAX)
CALL TERTAPE
CONTINUE
99 RETURN
300 FORMAT(8(A8*2X))
4103 FORMAT(24H LOGICAL UNIT ASSIGNMENT *18,
16H IS IN ERROR, THE FOLLOWING OPTION CONTROL CARD WILL NOT BE EXER
ICISED )
4104 FORMAT(1X*8(A8*2X))
5288 FORMAT(5X,31H DATABASE AHEAD OF CONTROL CARDS */5X,
*11H DATABASE = *215.8M CARD = *215)
700 FORMAT(8(A8*2X),40X)
END
204000
205000
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231000
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240000
241000
242000
243000

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5.4TS NEWDATA

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IDENT NEWDATA

PROGRAM LENGTH
ENTRY POINTSNEWCARDS
NEWDATA

BLOCK NAMES

ICRIST
 ICONFOL
 ITP
 MYGCOUS
 MYINPUT
 MYGUT
 MYPRINT
 MYTAPES
 NCTEST
 IENDSET
 NENSET
 LOOFLAG
 LOOFLAG

EXTERNAL SYMBOLS

Q3410040
 Q3900040
 Q1010100
 Q3010440
 THEND.
 Q890101.
 SETHEAD
 RUARMAY
 TERM1AP
 NUNGET
 ABORT
 MOVEIT
 BUFFIT
 ILCK
 PAGESKP
 IPHINT
 CUT
 WRARMAY
 TERM1APE
 Q891F0F
 REM.
 TSM.
 DEC.
 STM.
 QASINGL.

J1107
 J0215
 J0120
 J0001
 J0001
 J0001
 J0004
 J0012
 J0012
 J0003
 J0005
 J0001
 J0001
 J0001
 J0010

P00760 .102	00755	00764	00767
P00763 .103	00762		
P00765 .104			
P00770 .105			
P00772 .108			
P00203 .13			
P00223 .310			
P00226 .33	00503	00745	
P00241 .34	00576		
P00251 .35	00240		
P00255 .36	00253	00254	
P00265 .37	00253		
P00270 .38			
P00274 .39	00267		
P00277 .40	00276		
P00302 .41			
P00322 .4101	00320	00321	00323
P00325 .4102	00320	00324	
P00353 .42	00310		
P00306 .4209	00301		
P00311 .4210			
P00313 .4211	00305		
P00361 .4250			
P00365 .45	00264	00273	00360
P00402 .451			
P00400 .452			
P00405 .46	00250	00377	00404
P00411 .50	00225	00276	
P00414 .51	00404	00410	
P00474 .510			
P00462 .511	00461		
P00471 .512	00461		
P00477 .52	00475		
P00502 .5277	00430	00476	00501
P00540 .53	00500		
P00543 .54	00542		
P00550 .55	00546		
P00560 .5555	00546	00547	
P00552 .56			
P00421 .57			
P00431 .59	00420	00420	
P00444 .590			
P00564 .60	00542		
P00567 .61	00566		
P00577 .610	00576		
P00614 .70	00566		
P00617 .71	00427	00616	
P00635 .710	00632	00634	
P00674 .7100	00651		
P00633 .7118			
P00645 .72	00413	00616	
P00652 .73	00647		
P00650 .7322			
P00701 .74	00651		

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P00704	.16	00673	00700				
P00715	.7660	00705	00706				
P00723	.77	00352	00673	00700			
P00707	.7710						
P00736	.7794						
P00741	.7795						
P00643	.78	00735					
P00640	.79	00641					
P00640	.80	00634					
P00746	.80	00473					
P00751	.801	00613	00476	00501	00642	00642	
P00775	.81	00774	00722				
P01006	.8199						
P01010	.82	00774	01005				
P01015	.821	01012					
P01021	.83	01014	01020				
P01013	.8310						
P01025	.84	01020					
P01030	.85	01027					
P01036	.87	01027					
P01053	.99						
P00003	..100000	00134					
P00004	..100001	00203					
P00005	..100002	00237					
P00006	..100003	00252					
P00007	..100004	00266					
P00010	..100005	00275					
P00011	..100006	00300					
P00012	..100007	00307					
P00013	..100008	00357					
P00014	..100009	00440					
P00015	..100010	00442					
P00021	..100011	00575					
P00022	..100012	00612					
P00023	..100013	00720					
P00024	..100014	00754					
P00025	..100015	00761					
P00026	..100016	00766					
P00027	..100017	01011					
P00030	..100018	01023					
P00031	..100019	01026					
P00032	..300						
P00040	..4103	00330					
P00061	..4104	00340					
P00016	..500	00450					
P00070	..5288	00505					
P00111	..700	00656	00523				
P01075	JLINE	01075	00423	00454	00500	00510	00526
P01076	JNDEX	01001					
P01077	JOLDSET	00146					
C00002	JSET	00177	00460	00463	00452	00452	00457
		00506	00421	00463	00452	00462	00462
			00524	00524	00772	01001	00475
			00414	00414	01037	01017	00506
			00317		01040		
C00001	JTIN						
C00004	KINCARDS						
C00003	KTAPECUT						

CU0000	LAST	CU100	CU043	CU072	CU0514	CU0532	CU0544	CU0602	CU0640		
CU0100	LINENC	CU374	CU026	CU0477	CU1044	CU1030					
CU0200	LCUT	CU323	CU130								
CU0300	MAXDELE	CU293	CU0543								
CU0400	MOVEIT	CU577	CU0715								
CU0500	MYCOPCS	CU426									
CU0600	MYDBPCS	CU423									
CU0700	DEFINAE	CU133									
CU0800	NEWCARDS	CU215									
CU0900	NEWDATA	CU120									
CU1000	NEWDATE	CU401	CU0364	CU0364	CU0704	CU0704	CU0704	CU0707	CU0714	CU0714	CU0714
CU1100	NEWSET	CU136	CU0135	CU0711							
CU1200	NLINE	CU464	CU0465	CU0554							
CU1300	NMAX	CU125	CU0433	CU0554	CU1034	CU1050					
CU1400	NOTEST	CU003	CU0222	CU0113	CU1016						
CU1500	NUNDEL	CU175	CU0544	CU0556							
CU1600	NUNGET	CU260	CU0313	CU0365	CU0371						
CU1700	NUNDEF	CU127	CU0131								
CU1800	CUT	CU121	CU0205	CU0433	CU0437	CU0437	CU0443	CU0450	CU0554	CU0753	CU0753
CU1900	CUTSTLFF	CU205	CU0760	CU0765	CU0765	CU1025	CU1025	CU1034	CU1050		
CU2000	PAGESKP	CU106									
CU2100	GL010100	CU142	CU0743	CU0164	CU0223	CU0375	CU0402	CU0411	CU0416	CU0540	CU0564
CU2200	U3000040	CU130	CU0151	CU0614	CU0645	CU0726					
CU2300		CU506	CU0132	CU0147	CU0153	CU0162	CU0166	CU0227	CU0242	CU0271	CU0303
CU2400		CU126	CU0406	CU0561	CU0604	CU0610	CU0620	CU0623	CU0621	CU0636	CU0724
CU2500		CU354									
CU2600		CU730	CU0157	CU0170	CU0172	CU0732					
CU2700		CU155	CU0121	CU0216							
CU2800		CU000									
CU2900		CU071									
CU3000		CU054									
CU3100		CU233	CU0431	CU0552	CU0571	CU0605	CU0607				
CU3200		CU171	CU0272	CU0565							
CU3300		CU737									
CU3400		CU212	CU0336	CU0503	CU0521						
CU3500		CU326	CU0312	CU0633	CU0650	CU0734	CU0742	CU0727			
CU3600		CU141	CU0304	CU0631	CU0646						
CU3700		CU154									
CU3800		CU246	CU1051	CU0455	CU0516	CU0534	CU0666				
CU3900		CU333	CU0350								
CU4000		CU551									
CU4100		CU654	CU146								
CU4200		CU132									
CU4300		CU207									
CU4400		CU347									
CU4500		CU444									
CU4600		CU557	CU0557								
CU4700		CU665									
CU4800											
CU4900											
CU5000											
CU5100											
CU5200											
CU5300											
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CU9800											
CU9900											

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SUBROUTINE NEWDIR
  CSUBR  NEWDIR  ZOSEPT1 *****
  CUSE   MPRTPT  START *****
  COMMON/MPRTPT/MPRTPT *****
  CEND   MPRTPT *****

  DATA (MPRTPT=0) *****
  C      READS CARDS TO MODIFY EXISTING DIRECTORY OR CREATE NEW.
  C*****
  CUSE   ERRCRM  START *****
  C      COMMON/ERRCRM/JERR,IENSW *****
  C      ERRCRM *****
  C*****
  DIMENSION NFORM(3),NLIST(10)
  DATA(NFORM=1M,(1M,1M)) *****
  C*****
  CUSE   MYOUT  START *****
  COMMON/MYOUT/CUTSTUFF(10) *****
  TYPE INTEGER CUTSTUFF *****
  MYOUT *****
  ITP *****
  COMMON/ITP/ITP *****
  ITP *****
  TWCRD *****
  COMMON/TWCRD/TWCRD,ITWCRD *****
  EQUIVALENCE (TWCRD,ITWCRD) *****
  TWCRD *****
  C*****
  DIRECTORY START *****
  COMMON/DIRECTRY/IDF,PLASTLIST,INDIR,NOLIST,ATTNAME(500),
  1  IFORMAT(500),ICCODE(500),DEFAULT(500),IDEFAULT(500),
  2  N1(500),FN1(500),N2(500),FN2(500),LISTCHK(500),
  3  GLOB(500),LISTVALS(2000)
  EQUIVALENCE(N1,FN1),N2,FN2),(IDEFAULT,IDEFAULT)
  TYPE LOGICAL LISTCHK,GLOBAL
  TYPE INTEGER ATTNAMX
  TYPE INTEGER ATTNAM
  TYPE INTEGER ATTNAM
  EQUIVALENCE(LG1,LISTCHK),(LG2,GLOBAL) *****
  C*****
  CEND   DIRECTRY *****
  COMMON/XYZ/AMIN,XMAX *****
  CUSE   SIDECC  START *****
  COMMON / SIDECC/ IXSD *****
  SIDECC *****
  JOESTEST START *****
  COMMON/JOESTEST/JOESTEST *****
  JOESTEST *****
  TYPE INTEGER FCRMTX *****
  EQUIVALENCE(UEFAULX,NUEFAULTX) *****
  CALL NEWCARDS *****
  ICODX=CUTSTUFF(1) *****
  ATTNAMX=CUTSTUFF(2) *****
  FCRMTX=CUTSTUFF(3) *****
  ICCDEX=NUMGET(CUTSTUFF(4)*8) *****
  IDEFAULT=CUTSTUFF(5) *****
  N1=CUTSTUFF(6) *****
  N2=CUTSTUFF(7) *****
  IXCARD=CUTSTUFF(9) *****
  IF(ICCDEX=00,J=0K, ICCDEX=00,4) 80,87
  ITRAN=1
  80

```



```

      GC TC 80
      87 ITRAN=2
      80 CONTINUE
      C   INTERPHET COMMAND
      GC TC 20
      3 CONTINUE
      IIP = JERR
      C   LOOP TO WRITE ERROR MESSAGE
      UC 337 I = 1,5
      ITWORD = BHATTENCR
      CALL WRWRD
      ITWRD = ATTNAMX
      337 CALL WRWRD
      CALL WHARRAY(OUTSTUFF,10)
      IERSW=2
      GC TC 5
      20 IF (ICOM .EQ. 3)ADD(21,50)
      C   HERE ADD NEW ATTRIBUTE TO DIRECTORY
      21 J=1
      IF (J)J=2,2,22
      22 GC TC 3
      24 NFORM(2)=FORMAIX
      IF (IDFAULX .EQ. SHBLANK)46,47
      46 NDEFAULX=1H
      GC TC 48
      C   TRANSLATE DEFAULT
      47 GC TC (70,71),ITRAN
      70 NDEFAULX=NUMGET(IDFAULA,8)
      GC TC 48
      71 DECODE(8,NFORM,IDEFAULX)DEFAULX
      C   TRANSLATE CHECKING
      48 IF (NX1 .EQ. 4)LIST(25,128)
      128 IF (NX1 .EQ. 7)NGCHECK(126,25)
      126 NX1=1H
      127 NX2=1H
      GC TC 74
      25 GC TC (72,73),ITRAN
      72 NX1=NUMGET(NX1,8)
      NX2=NUMGET(NX2,8)
      GC TC 74
      73 DECODE(8,NFORM,NX1)NX1
      DECODE(8,NFORM,NX2)NX2
      74 ILISTC=C
      GC TC 36
      C   HERE ADD LIST
      46 NX1=LASTLIST+1
      ILISTC=1
      27 CALL NEWCARDS
      GC 17 JK=1,10
      17 NLIST(JK)=OUTSTUFF(JK)
      GC 32 I=1,8
      IF (NLIST(I) .EQ. 1H 135,29)
      29 LASTLIST=LASTLIST+1
      IF (NLIST(I) .EQ. SHBLANK)30,31
      30 LISTVALS(LASTLIST)=IH
      GC TC 32

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31 GC TO (75,76),JTRAN
75 LISTVALS(LASTLIST)=NUMGET(NLIST(I),8)
GC TO 32
76 DECDECODE(B*INFORM*NLIST(I))LISTVALS(LASTLIST)
32 CONTINUE
GC TO 27
C HERE LIST TRANSLATED
35 NXX2=LASTLIST
36 CONTINUE
C UPDATE DIRECTORY
C SEE IF CAN OVERWRITE PREVIOUS DELETED
40 DC 61 I=1,IDEF
IF (ATTNAME(I) .EQ. THUELETED) 60,61
60 IF (IDEFAULT(I) .EQ. ATTNAME) 62,61
61 CONTINUE
IDEF=IDEF+1
I=IDEF
62 ATTNAME(I)=ATTNAMEX
IF (FORMAT(I) .NE. FORMATX)
ICCODE(I)=ICCODEX
DEFAULT(I)=DEFAULTX
N1(I)=NXX1
N2(I)=NXX2
LISTCHK(I)=LISTC
GC TO 5
C CONTINUE TRANSLATING COMMANDS
50 CONTINUE
IF (ICOM .EQ. 8) MENDIRECT) 51,52
52 ITP = JERR
DC 53 I = 1,5
ITWRO = ICGM
CALL WRWROD
ITWRO = IXCARU
CALL WRWROD
53 CONTINUE
CALL WRARRAY (OUTSTUFF,10)
GC TO 5
51 CONTINUE
JJJ = SHOESIG
JUDEST = ITLE( JJJ,ATTNAME,IDEF)
JJJ = 4NSIDE
IXSD = ITLE( JJJ, ATTNAME,IDEF)
JJJ = 7MP INKILL
J = ITLE(JJJ,ATTNAME,IDEF)
XMIN = DEFAULT(J)
JJJ = 7MAXKILL
J = ITLE( JJJ, ATTNAME, IDEF)
XMAX = DEFAULT(J)
RETURN
END

```

5.4TS NEWDIR

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

NEWDIR

MPRTOPT

ERRCHM

MYGUT

IIP

TWCHU

DIRECTRY

XYZ

SIDECC

JDESTEST

EXTERNAL SYMBOLS

THEAU.

Q3U1U040

Q8Q1CT.

NEWCARDS

NUMGET

WHWQND

WRARMAY

ITL

DEC.

QNSINGL.

IDENT

U0476

U0U42

U0U01

U0U02

U0U12

U0U01

U0U01

11054

U0U02

U0U01

U0U01

NEWDIR

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ED

0

PAGE NO.

4

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NEWDIR

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0

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P00237 .27	00312			
P00253 .29	00252			
P00102 .3	00135			
P00260 .30				
P00263 .31	00257			
P00310 .32	00262	00274		
P00114 .337				
P00313 .35	00252			
P00315 .36	00232			
P00315 .40				
P00142 .46	00141			
P00144 .47	00141			
P00164 .48	00143	00153		
P00356 .50	00126			
P00046 .5	00124			
P00403 .51	00360	00355	00402	
P00361 .52	00357			
P00375 .53				
P00323 .60				
P00327 .61	00322	00326		
P00335 .62	00326			
P00147 .70	00146			
P00154 .71	00146			
P00201 .72	00200			
P00211 .73	00200			
P00231 .74	00175	00210		
P00266 .75	00265			
P00275 .76	00265			
P00101 .80	00076			
P00075 .86	00072			
P00077 .87	00074			
P00021 .100000	00106			
P00022 .100001	00126			
P00023 .100002	00140			
P00024 .100003	00142			
P00025 .100004	00165			
P00026 .100005	00170			
P00027 .100006	00172			
P00030 .100007	00174			
P00031 .100008	00251			
P00032 .100009	00256			
P00033 .100010	00260			
P00034 .100011	00321			
P00035 .100012	00357			
P00036 .100013	00403			
P00037 .100014	00412			
P00040 .100015	00421			
P00041 .100016	00432			
P00272 .Z000001	00267			
P00467 J	00133	00427	00440	00440
C00000 JDETEST	00411			
Z00000 JERR	00102	00361	00361	
P00470 JJJ	00404	00407	00416	00436
P00471 JK	00242			

5.415	NEWDIR	11/24/71	ED	0	PAGE NO.	7
C00001	LASTLIST	00233	00253	00253	00261	00273
C05674	LISTCHEK	00313	00253	00253	00261	00273
C05734	LISTVALS	00354	00305	00305	00304	00304
C05674	LOG1	00262				
C05714	LOG2	00021				
C00000	MPRTGPT	00346				
C03724	N1	00350				
C04710	N2	00143				
P00020	NDEFAULT	00152				
C00002	NOIMDIR					
C00003	NDIMLIST					
X00004	NEWCARDUS	00237				
P00042	NEWDIR	00046				
P00003	NFCRM	00042				
P00006	NLIST	00021				
X00005	NUMGET	00245				
P00472	NX1	00056				
P00473	NX2	00065				
P00474	NX1	00067				
P00475	NX2	00173				
C00000	OUTSTUFF	00175				
X00002	Q3Q10040	00050				
X00003	Q8001010	00065				
X00012	QNSINGL.	00353				
X00001	THEND.	00000				
P00330	TS00004.	00446				
C00000	TWCRD	00162				
X00007	WRARMAY	00316				
X00006	WRWCHD	00120				
P00106	WSD0001.	00110				
P00244	WSD0002.	00117				
P00250	WSD0003.	00246				
P00317	WSD0004.	00311				
P00365	WSD0005.	00331				
C00001	XMAX	00376				
C00000	XMIN	00442				
		00431				
	00214 SYMBCL					

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```

SUBROUTINE CUT
  CUSEM  CUT      START *****
  C***  SUBROUTINE IS DESIGNED TO PRINT CUT CARD IMAGES UPON REQUEST
  C***  COMMON:MPRINT/ISTAR,NUNDEF *****
  CUSE  MYCUT      START *****
  C***  COMMON/MYCUT/CUTSTUFF(10) *****
  C***  TYPE INTEGER CUTSTUFF *****
  CEND  MYCUT *****
  C***  TYPE LOGICAL NUNDEF,NUNDEF *****
  CUSE  ICONTROL   START *****
  C***  COMMON/ICONTROL/ICOM *****
  CEND  ICONTROL *****
  C***  DATA(IAS1=2H ) *****
  C***  THE PROPER VALUE OF ICOM IS DETERMINED IN SUBROUTINE NEWDATA
  C***  GO TO (54,51,55,55,55),ICOM
  C***  HERE FOR DEFINE CARD, SKIP A LINE IF THE PREVIOUS CARD WAS
  C***  NOT A DEFINE CARD
  51  IF(NUNDEF)52,55
  52  PRINT 1001
  NUNDEF=0
  NUNDEF=1
  IAS1=2H*
  GO TO 55
  C***  HERE FOR ITEM CARD, SKIP A LINE
  54  PRINT 1001
  NUNDEF=NUNDEF+1
  IAS1=2H
  GO TO 55
  C***  HERE FOR UNDEFINE, SKIP A LINE IF PREVIOUS CARD IMAGE WAS
  C***  NOT AN UNDEFINE CARD
  552 IF(NUNDEF)553,55
  553 PRINT 1001
  NUNDEF=1
  IAS1=2H**
  NUNDEF=C
  C***  PRINT OUTPUT - IAS1 IS SET TO 1H* FOR DEFINE, 2H** FOR UNDEFINE,
  C***  AND IS BLANK FOR ALL OTHER CASES - IF ISTAR IS EQUAL TO 1H*,
  C***  THE CARD IMAGE IS AN UPDATE TO THE DATA LIBRARY
  55  PRINT 1000,((IAS1,(CUTSTUFF(I),I=1,10),ISTAR)
  1001 FORMAT(1H*)
  1000 FORMAT(3X,A2,2X,9(A8,3X),A8,A1)
  RETURN
END

```

IDENT CUT

00147
00026

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

CUT

00003
00012
00001

MYPRINT
MYCUT
ICONTROL

EXTERNAL SYMBOLS

03000040
THEND.
03010040
080010.
STH.
ONSINGL.

5.ATS

OUT

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EO C

PAGE NO.

3

P00143 BEGIN.
 P00142 CNVRT1.
 P00004 CRFMT.
 P00001 DICT.
 P00144 ENDING.
 P00000 EXIT.
 P00004 FORMAT.
 P00051 G600000.
 P00067 G600001.
 P00111 G600002.
 P00140 G600003.
 P00145 I
 P00003 IAST
 CU0000 ICCM
 P00146 IGCTC.
 P00143 INITIAL.
 CU0000 ISTAR
 P00040 .51
 P00043 .52
 P00061 .54
 P00120 .55
 P00100 .552
 P00103 .553
 P00004 .100000
 P00013 .1000
 P00005 .100001
 P00006 .100002
 P00007 .1001
 CU0001 NDEFINE
 CU0002 NUNDEF
 P00026 CUT
 CU0000 CUTSTUFF
 X00001 Q3000040
 X00003 Q3010040
 X00004 Q800001.
 X00006 QNSINGL.
 X00005 STH.
 X00002 THEND.
 P00127 W500001.
 00047 SYMBOLS

00143
 00125
 00140
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 00144
 00057
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 00120
 00126
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 00110
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 00137
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 00112
 00116

```

SUBROUTINE PROMLY
  CSUBR  PROMLY  START
  CUSE   MYIDENT START
  CEND   COMMON/MYIDENT/MYIDENT
  CUSE   MYIDENT START
  CEND   OPTIONS START
  CUSE   COMMON / OPTIONS/ NCON(R),INTAPE,NOU1,NOU2,NPA,NUM,NCPSET
  CEND   1,ISZISZ
  CEND   OPTIONS START
  CUSE   NPRINT START
  CEND   COMMON/NPRINT/NPRINT
  CUSE   NPRINT START
  CEND   HIST START
  CUSE   COMMON/HIST/NCPUSD(10),NUSED
  CEND   HIST
  CEND   MYIDENT = BMQUIBASE
  CEND   NPRINT = 1
  CEND   CALL INITAP
  C      CHECK TO SEE IF DATA PRINT IS REQUESTED IN FIRST FIELD
  C      MYIDENT = BMQUICKDB
  C      1 IF (NCON(3).NE.BMPRINTDATA) GO TO 2
  C      NUSED = NUSED + 1
  C      NCPUSD(NUSED) = NCON(3)
  C      CALL PHNTDATA(INTAPE)
  C      GO TO 3
  C      CHECK TO SEE IF BASE PRINT IS REQUESTED IN FIRST FIELD
  C      2 IF (NCON(3).NE.BMPRINTBASE) GO TO 3
  C      NUSED = NUSED + 1
  C      NCPUSD(NUSED) = NCON(3)
  C      CALL PHNTBASE(INTAPE)
  C      CHECK TO SEE IF DATA PRINT IS REQUESTED IN SECOND FIELD
  C      3 IF (NCON(4).NE.BMPRINTDATA) GO TO 4
  C      NUSED = NUSED + 1
  C      NCPUSD(NUSED) = NCON(4)
  C      CALL PHNTDATA(INTAPE)
  C      CHECK TO SEE IF BASE PRINT IS REQUESTED IN SECOND FIELD
  C      4 IF (NCON(4).NE.BMPRINTBASE) GO TO 5
  C      NUSED = NUSED + 1
  C      NCPUSD(NUSED) = NCON(4)
  C      CALL PHNTBASE(INTAPE)
  C      5 CONTINUE
  C      RETURN
  C      END

```

5.0TS PHONLY

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

PHONLY
MYIDENT
OPTIONS
NOPRINT
MIST

EXTERNAL SYMBOLS

GRQDICT.
INITAP
PHNTUATA
PHNTBSE

IDENT

U0111
U0011
U0001
U0017
U0001
U0013

PHONLY

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ED

0

PAGE NO.

2

5.4TS

PHORLY

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EO 0

PAGE NO.

3

P00107 BEGIN.
P00001 DICT.
P00110 ENDING.
P00000 EXIT.
P00003 FCHMAT.
X00002 INITAP
P00107 INITIAL.
C00010 INTAPE
C00016 ISETSIZ
P00025 .1
P00030 .100001
P00031 .100002
P00045 .100003
P00046 .100004
P00061 .100005
P00062 .100006
P00075 .100007
P00076 .100008
P00042 .2
P00056 .3
P00072 .4
P00106 .5
P00003 .100000
P00004 .100001
P00005 .100002
P00006 .100003
P00007 .100004
P00010 .100005
C00000 MYIDENT
C00000 NCON
C00000 NCPRIAT
C00015 NCPSET
C00000 NCPUSUD
C00011 NCUT1
C00012 NCUT2
C00013 NPR
C00014 NUM
C00012 NUSED
X00004 PRNTISE
X00003 PRNTDATA
P00011 PRONLY
X00001 QBQDICT.
00052 SYMBOLS

000107
000103
000104
000110
000115
000201
000114
000400
000222
000106
000223
000225
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000555
000771
001005
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5.4TS PRICONT

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

PRICONT

IDESIGS
NODESIGS
IWSIDE

EXTERNAL SYMBOLS

THEND.
ORDDICT.
PAGE\$KP
STM.
ONSINGL.

IDENT

U0225
U0066
U1750
U0004
U0002

PRICONT

11/26/71

ED

0

PAGE NO.

2

S.ITS	PRTCOMT	11/24/71	ED	0	PAGE NO.	3
P00213	BEGIN.	00213				
P00212	CNVRT1.	00104				
P00003	CRFMT.	00107				
C00372	DESIGNC	00127				
		00152				
P00001	DICT.	00070				
		00205				
P00214	ENDING.	00071				
P00000	EXIT.	00214				
P00003	FORMAT.	00076				
P00107	GG00000.	00107				
P00115	GG00001.	00142				
P00100	GG00002.	00163				
P00171	GG00003.	00174				
P00206	GG00004.	00127				
P00215	I	00147				
C00000	DESIGS	00124				
P00216	DCMNS	00121				
P00213	INITIAL.	00071				
P00217	ICTRG1	00117				
P00220	ICTRG2	00116				
P00221	ICTRG3	00116				
P00222	IUPS	00123				
C00000	INSIDE	00103				
P00206	.7555	00103				
P00142	.8621	00101				
P00003	.8620	00145				
P00042	.8622	00112				
P00053	.8623	00106				
P00027	.8625	00177				
P00017	.8626	00073				
P00223	J	00141				
P00224	JTCIAL	00122				
C00002	KRMN	00117				
C00000	NODESIGS	00121				
X00003	PAGESKP	00074				
P00000	PRTCAT	00066				
X00002	QBODICT.	00000				
X00005	WASINGL.	00211				
X00004	STM.	00077				
X00001	THEND.	00105				
P00161	TS00002.	00125				
P00074	WS00001.	00207				
P00126	WS00002.	00162				
	WS0052 SYMBOLS					

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```

SUBROUTINE SETLO
  CSUBH  SETLO 16APR71
  CUSE  OPTIONS START *****
  COMMON / OPTIONS/ NCON(8),INTAPE,NCUT1,NCUT2,NPR,NUM,NCPSSET
  1 *ISETSIZ *****
  CEND  OPTIONS *****
  C  COMMON BLOCK REQUIRED BY FILEHANDLER *****
  CUSE  ITP START *****
  COMMON/ITP/ITP *****
  CEND  ITP *****
  CUSE  MYIDENT START *****
  COMMON/MYIDENT/MYIDENT *****
  CEND  MYIDENT *****
  CUSE  TWCRD START *****
  COMMON/TWCRD/TWCRD,ITWCRD *****
  EQUIVALENCE (ITWCRD,ITWCRD)
  CEND  TWCRD *****
  CUSE  NOPRINT START *****
  COMMON/NOPRINT/NOPRINT *****
  CEND  NOPRINT *****
  C  C
  C  END COMMON BLOCKS REQUIRED BY FILEHANDLER
  C
  C  COMMON BLOCKS OPTIONAL TO FILE HANDLER
  C  COMMON / FILABEL / INIDENT, INRUNNG, INDATE, INFOK, INSECR,
  1 INTIME, INLENGTH, INCOMM:5)
  C
  C  COMMON / IFIPRINT / IFIPRINT (10)
  C  COMMON / MYLABEL / MYFORM, MYSECR, MYLENGTH,MYCOMM(S)
  C  COMMON / TODAY / NOWRUNG, NCWDATE , NOWTIME
  C  C
  C  END COMMON BLOCKS OPTIONAL TO FILE HANDLER
  C
  C  COMMON / 1 / NSAVE(SUO:2), NS(500)
  DIMENSION INCARD(10), IMCARD(10)
  DIMENSION ISETS(50)
  IMP  LOCAL FLAG TO SHOW IF LINE PRINTED - 1 IF NOT
  INCARD  USED TO COMPARE TAPES IF 2 ARE MADE
  IMCARD  CARD INPUT ARRAY-
  ISETS  ON DEFAULT OPTION MAXIMUM SET SIZE
  ISETSIZ  USED TO SAVE ITWCRD IF 2 TAPES ARE MADE.
  IT  NUMBER OF DEFINED ATTRIBUTES IN DIRECTORY
  NAT  1 IF IN DIRECTORY-2 TO FLAG END DIRECTORY
  C  NDIR  SET TO 4 IF LAST ON FINI CARD READ
  C  NEND  NUMBER OF COMPARE ERRORS IF 2 TAPES ARE MADE
  C  NER
  C  NL  NUMBER OF RECORDS COMPARED IF 2 TAPES ARE MADE
  C  NREC
  C  NSET  CURRENT SET NUMBER, DATA SET TO 1
  C  NTIMES  LOCAL COUNTER TO LOOK AT UNDEFINES
  C  DATA(ISETSIZ = 5000)
  DATA(
  .DATA(
    NSET = 1)
    NDIR = 1)

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```

DATA(      NAT = 1)
DATA(      NEND = 1 )

C
C
100 FORMAT(8(A8,A2))
101 FORMAT(18)
102 FORMAT(8(A8,A2),18,2X,A8)
103 FORMAT(11M)
104 FORMAT(11M)
105 FORMAT(16X,A2,2X,8(A8,A2,2X),18,4X,A8)
106 FORMAT(1X,*,EMROR IN RECCO NUMBER*,16,*,TOTAL ERRORS TO HERE*,16,/,
1,*,TAPE1=*,8(A8,A2),18,2X,A8,/,*,TAPE2=*,8(A8,A2),18,2X,A8)
107 FORMAT(11L,5X,*,-----GOOD TAPES-----*)
108 FORMAT( 214)
109 FORMAT( 1X, *, ATTRIBUTE MISPELLED *, 2X, 8(A8,2X))
110 FORMAT( 1X, *, END FILE OR LAST CARD FOUND BEFORE ENDINCT * )
111 FORMAT( 110, /, 10(A8,2X))
112 FORMAT( 1X, *,NC ERRORS IN *, 15,*, RECORDS* )
113 FORMAT( 2X, *,TAPES DO NOT MATCH * )
114 FORMAT( 10X, 10(A8,4X),/,10X,10(A8,4X) )
115 FORMAT( 2X, *, NREC = *, 110)
116 FORMAT(1X,*,TAPES DO NOT AGREE*,15,*,DIFFERENCES IN*,15,*,RECORDS*)
120 FORMAT( 10X, 8(A8,4X),215,4X,A8)
121 FORMAT( 8(A8,2X))
130 FORMAT( 6X, 1H*,3X,8(A8,4X),215,4X,A8)
131 FORMAT( 6X, 2H*,2X,8(A8,4X),215,4X,A8)
132 FORMAT(10X,8(A8,4X),215,4X,A8)
160 FORMAT( 2X, *, OPTION NOT IMPLEMENTED,  DEFAULT OPTION OVERRIDES*)

C
C
C
PRINT 104
NCPRIOT = 1
MYIDENT = 8HQUIKBASE
CALL INITAP
ITP = NCUT1
MYIDENT = 8HUALI181
CALL SETWRT
CHECK TO SEE IF BACK UP COPY OF TAPE REQUESTED
IF( NCUT2 .LE. 0 .OR. NCUT2 .EQ. NCUT1 )GO TO 456
ITP = NCUT2
MYIDENT = 8HUALI182
CALL SETWRT
456 CONTINUE
NSET = 1
NOIR = 1
NAT = 1
NEND = 1
10 READ(1NTAPE,100)INCARD
CHECK TO SEE IF END OF FILE ON TAPE
IF(EOF,1NTAPE)GO,20
CHECK TO SEE IF LAST CARD READ IN
20 IF( INCARD(1) .EQ. 4HLAST ) GO TO 90
IF(1NCARD(1) .EQ. 8HENDINPUT) GO TO 90
CHECK TO SEE IF USER IS REQUESTING NEW SET HERE

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IF (INCARD(1) .EQ. 8) BEGINSET 160 TO 724
IF (INCARD(1) .EQ. 8) BEGINSET 160 TO 724
  GO TO 24
724 NSET = NUMGET (INCARD(3) , 10)
C IF USER DID NOT SUPPLY SET NUMBER, MAKE SET = 1
IF (NSET .LE. 0) NSET = 1
  GO TO 16
C CHECK FOR AN-AUD-CARD
24 IF (INCARD(1) .NE. 3) ADD 1 GO TO 22
23 INCARD(7) = NUMGET (INCARD(7) , 10)
  ENCODE (8 * 101, INCARD(7)) INCARD(7)
  INCARD(8) = 1H
  NS(NAT) = INCARD(3)
  NAT = NAT + 1
C TO HERE STILL IN DIRECTORY
C CHECK FOR END OF DIRECTORY
22 IF (INCARD(1) .EQ. 8) BEGINDIRECT 1 NOIN = 2
  LOOP TO WRITE RECORD TO TAPE
  DO 32 I = 1, 15, 2
    ITP = NOUT1
    ITWROD = INCARD(1)
    CALL WRWROD
    IF (NOUT2 .LE. 0) GO TO 32
    ITP = NOUT2
    CALL WRWROD
32 CONTINUE
  ENCODE ( 8, 108, ITWROD) NSET, NUM
  ITP = NOUT1
  CALL WRWROD
  IT = ITWROD
  ITWROD = NCON(6)
  CALL WRWROD
C CHECK TO SEE IF BACK UP TAPE IS TO BE WRITTEN
IF (NOUT2 .LE. 0) GO TO 33
  ITP = NOUT2
  ITWROD = IT
  CALL WRWROD
  ITWROD = NCON(6)
  CALL WRWROD
33 GO TO (78, 79) APT
78 PRINT 120, (INCARD(1), I = 1, 15, 2), NSET, NUM, NCON(6)
79 CONTINUE
  NUM = NUM + 1
  GO TO (10, 11) APT
C TO HERE IF LAST OF DICI READ
C
11 NUM = 1
  IF (NCPSET .NE. 1) ISETSI2 = 9999
  GO TO (41, 42, 43, 44, 45) NCPSET
42 GO TO 44
43 GO TO 44
44 NSETC1 = 8HCLASS
  NSETC2 = 8HSHIVE
  GO TO 41
45 CONTINUE

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C      NSET = NSET + 1
      GC TO 240
      C      DEFAULT OPTION
      41 NAT = NAT - 1
      NSET = 2
      240 CONTINUE
      DC 241 I = 1, 1000
      241 NSAVE(I) = IM
      C      LOOP TO CLEAR NSAVE ARRAY TO BLANKS
      IF (NPR.NE.1) GC TO 200
      PRINT IC4
      C      PRIMARY READ STATEMENT
      200 READ (INTAPE, 121) (INCARD(I), I = 1, 8)
      2001 CONTINUE
      C      INP=1
      C      CHECK TO SEE IF END OF FILE
      IF (ECF.INTAPE) 91, 80
      C      CHECK TO SEE IF END OF DATA
      80 IF (INCARD(1) .EQ. 4MLAST) NEND = 2
      IF (INCARD(1) .EQ. 8HENDINPUT) NEND = 2
      IF (INCARD(1) .EQ. 4HEINI) NEND = 2
      C      IF (NCPSET.EQ.5, GC TO 85
      C      CHECK TO SEE IF DEFINE CARD
      IF (INCARD(1) .NE. 8HDEFINE) GC TO 248
      GC TO (81,82,82,82,85) NCPSET
      C      CHECK TO SEE IF USER REQUESTING NEW SET HERE
      85 IF (INCARD(1) .EQ. 8H8EGINSET, OR, INCARD(1) .EQ. 6HNEWSET) GC TO 850
      GC TO (186,262) NPR
      850 NSET = NSET + 1
      C      NIX = NUMGET (INCARD(2), 8)
      C      CHECK TO SEE IF SET NUMBER SUPPLIED
      IF (NIX .LE. 0) NIX = NSET
      NSET = NIX
      NUM = 1
      C      CHECK PRINT OPTION
      IF (NPR.NE.1) GC TO 200
      PRINT IC4
      PRINT 132, (INCARD(I), I = 1, 8), NSET, NUM
      GC TO 200
      C      TC HERE FOR OPTIONS OF SIDE, CLASS, OR BOTH
      C      LOOP TO CHECK FOR #SIDE # OR # CLASS#
      82 DC 83 I=2,8,2
      IF (INCARD(I) .EQ. NSETC1) GC TO 84
      IF (INCARD(I) .EQ. NSETC2) GC TO 84
      83 CONTINUE
      GC TO (186,262) NPR
      84 NSET=NSET+1
      NUM=1
      GC TO (185,262) NPR
      185 PRINT IC4
      186 PRINT 130, (INCARD(I), I=1,8), NSET, NUM, NCON(6)
      GC TO 262
      81 CONTINUE
      GC TO (88, 89) NPR
      C      SAVE ALL DEFINES IN NSAVE
      88 PRINT 130, (INCARD(I), I = 1, 8), NSET, NUM, NCON(6)

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```

      IMP=2
      C 89 CONTINUE
      C LCOPI TO SAVE DEFINED ATTRIBUTES DEFAULT OPTION
      DC 242 I = 1, NAT
      IF ( INCARD(2) .NE. NS(I) ) GO TO 242
      NSAVE(I,1) = INCARD(2)
      NSAVE(I,2) = INCARD(3)
      GO TO 243
    242 CONTINUE
      PRINT 109, (INCARD(I), I = 1, 8)
    243 IF ( INCARD(4) .EQ. 1H ) GO TO 247
      DC 244 I = 1, NAT
      IF ( INCARD(4) .NE. NS(I) ) GO TO 244
      NSAVE(I,1) = INCARD(4)
      NSAVE(I,2) = INCARD(5)
      GO TO 245
    244 CONTINUE
      PRINT 109, (INCARD(I), I = 1, 8)
    245 IF ( INCARD(6) .EQ. 1H ) GO TO 247
      DC 246 I = 1, NAT
      IF ( INCARD(6) .NE. NS(I) ) GO TO 246
      NSAVE(I,1) = INCARD(6)
      NSAVE(I,2) = INCARD(7)
      GO TO 247
    246 CONTINUE
      PRINT 109, (INCARD(I), I = 1, 8)
      GO TO 247
      C 247 REMOVE DEFINES WHEN UNDEFINED ENCOUNTERED
      C CHECK FOR UNDEFINE CARD
    248 IF ( INCARD(1) .NE. 8HUNDEFINE ) GO TO 247
      IF (NPOS(1) .NE. 1) GO TO 247
      C CHECK FOR NON-DEFAULT OPTION
      GO TO (68, 69) NPR
    68 PRINT 131, (INCARD(I), I = 1, 8), NSET, NUM, NCON(6)
      IMP=2
      C 69 CONTINUE TO REMOVE ATTRIBUTES WHEN UNDEFINED
      C LCOPI TO REMOVE ATTRIBUTES WHEN UNDEFINED
      NTIMES = 2
    2250 DC 250 I = 1, NAT
      IF (INCARD(NTIMES) .NE. NS(I) ) GO TO 250
      NSAVE(I,1) = 1H
      NSAVE(I,2) = 1H
      GO TO 251
    250 CONTINUE
      PRINT 109, (INCARD(I), I = 1, 8)
      C PRINT MSG
    251 NTIMES = NTIMES + 1
      C CHECK TO SEE IF THREE WITH CARD
      IF ( NTIMES.GT.3 ) GO TO 247
      IF (INCARD(NTIMES) .NE. 1H ) GO TO 2250
      C WRITE OUT CURRENT CARD
    247 CONTINUE
      GO TO (261, 262) NPR
    261 GO TO (263, 262) LMP
    263 PRINT 132, (INCARD(I), I = 1, 8), NSET, NUM, NCON(6)
    262 CONTINUE

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ENCODE( 8, 108, INCARD(9)) NSET, NUM
INCARD(10) = NCON(6)
ITP = NCUT1
CALL L WRARRAY(INCARD, 10)
CHECK TO SEE IF BACK UP IS TO BE MADE
IF( NCUT2 .LE. 0) GO TO 777
ITP = NCUT2
CALL WRARRAY(INCARD, 10)
777 CONTINUE
NUM = NUM + 1
GO TO(71, 72) NEND
71 CONTINUE
NEWF = 1
IF( NUM .LE. ISETSIZE) GO TO 200
CHECK FOR PROPER SET TERMINATION
IF( INCARD(1) .EQ. 8HUEFINE ) GO TO 201
IF( INCARD(1) .EQ. 8HUNDEFINE ) GO TO 201
READ(UNITAPE,121)(INCARD(I), I = 1, 8)
NEWF = 2
IF( INCARD(1) .EQ. 8HUEFINE ) OR, INCARD(1) .EQ. 8HUNDEFINE
1 OR, INCARD(1) .EQ. 8HITEM
204 DO 202 I = 1, 8
202 INCARD(I) = INCARD(1)
GO TO 2001
201 CONTINUE
GO TO (271,272) NPR
271 PRINT IC4
272 CONTINUE
NUM = 1
NSET = NSET + 1
J = 1
DO 567 K = 1, 10
567 INCARD(K) = 1H
INCARD(1) = 8HUEFINE
INCARD(10) = NCON(6)
LOOP TO PUT CUT LEFT OVER DEFINES ON A NEW SET
DO 350 I = 1, NAT
IF( NSAVE(I, 1) .EQ. 1H ) GO TO 350
J = J + 1
INCARD(J) = NSAVE(I, 1)
J = J + 1
INCARD(J) = NSAVE(I, 2)
IF( J .LT. 7) GO TO 350
ENCODE( 8, 108, INCARD(9)) NSET, NUM
J = 1
GO TO (338, 339) NPR
338 PRINT 130, (INCARD(L), L=1,8), NSET, NUM, NCON(6)
339 CONTINUE
ITP = NCUT 1
CALL WRARRAY(INCARD, 10)
IF( NCUT2 .LE. 0) GO TO 352
ITP = NCUT2
CALL WRARRAY(INCARD, 10)
352 NUM = NUM + 1
DO 351 K = 2, 7
351 INCARD(K) = 1H

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350 CONTINUE
C SEE IF PARTIAL DEFINE RECORD REMAINS
IF (J.EQ. 1) GO TO 203
ENCODE ( 8, 108, INCARD(9)) NSET, NUM
GO TO (209, 210), NPR
209 PRINT 130, (INCARD(L), L = 1, 8), NSET, NUM, NCON(6)
210 CONTINUE
NUM = NUM + 1
ITP = NCUT1
CALL WRARRAY(INCARD, 10)
IF (NCUT2.LE. 0) GO TO 203
ITP = NCUT2
CALL WRARRAY(INCARD, 10)
203 GO TO (200, 204), NMF
90 PRINT 110
PRINT 111, NAT, (NS(I), I = 1, NAT)
RETURN
91 NEND = 2
INCARD(1) = 4HLAST
DC 73 I = 2, 13
73 INCARD(1) = 1H
GO TO 247
72 ITP = NCUT1
CALL TERMTAP
C IF TWO TAPES WERE GENERATED COMPARE HERE
IF (NCUT2.LE. 0) GO TO 92
ITP = NCUT2
CALL TERMTAP
ITP = NCUT1
CALL SETREAD
ITP = NCUT2
CALL SETREAD
NREC = 0
NER = 0
1920 CONTINUE
LOOP TO COMPARE TWO TAPES
DC 93 L = 1, 20000
ITP = NCUT1
CALL RDARRAY(INCARD, 10)
ITP = NCUT2
CALL RDARRAY(INCARD, 10)
NREC = NREC + 1
IF (INCARD(1).EQ. 4HLAST -GR. INCARD(1).EQ. 4HLAST ) GO TO 96
DC 94 K = 1, 10
IF (INCARD(K).EQ. INCARD(K)) GO TO 94
95 CONTINUE
NER = NER + 1
PRINT 113
PRINT 115, NREC
PRINT 114, (INCARD(MX), MX = 1, 10), (INCARD(NX), NX = 1, 10)
GO TO 93
94 CONTINUE
93 CONTINUE
GO TO 1920
C CHECK FOR ERRORS OF COMPARED TAPES
96 IF (NER.LE. 0) PRINT 112, NREC

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372000
373000
374000
375000
376000
377000
378000
379000
380000
381000
382000

FTNS.5

IF 1 NER .GT. 0) PRINT 116, NER, NREC
92 RETURN
END

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PAGE NO. 8

383000
384000
385000

5.4TS

SETID

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

SETID

OPTIONS
ITP
MY:CENT
TACRU
NOPRINT
FILABEL
IFTFMT
MYLABEL
TQUAY

1

EXTERNAL SYMBOLS

THENO.
QUOICT.
INITAP
SETWIT
NUMGET
WNRKRD
WARRAY
TENTAP
SETREAD
RUARKAY
QUOIFCQ
TSH.
STM.
ENC.
SLL.
QMSINGL.

IDENT

SETID

02377
00534
00017
00001
00001
00001
00001
00014
00012
00010
00003
LF 34

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ED

0

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5.475	SEI10	11/24/71	ED	0	PAGE NO.	10
P02350 BEGIN.	02351	01000	01006	01073	01205	01212
P02347 CNVRT1.	00663	01267	01312	01315	01346	01436
	01265	01307	01563	01570	01571	01603
	01465	01527	02005	02034	02056	02077
	01655	02002	02010	02034	02056	02077
	02101	02143	02264	02341	02342	02342
P00123 CRFMT.	00534	00534	00534	00534	00534	00534
	00534	00534	00534	00534	00534	00534
	00534	00534	00534	00534	00534	00534
P00001 DICT.	00542	00553	00561	00612	00615	00640
	00661	00710	00720	00740	00746	00754
	00773	01060	01067	01105	01172	01200
	01214	01247	01272	01302	01352	01406
	01432	01442	01450	01523	01556	01613
	01624	01651	01713	01756	01765	02027
	02051	02060	02112	02132	02140	02172
	02202	02212	02223	02253	02266	02307
	02323	02330	02344			
	00660	00725	01575	02050		
X00016 ENC.	00537	02345				
P02352 ENDING.	00550	00572	00633	00650	00666	00674
P00000 EXIT.	01035	01045	01117	01353	01407	01502
P00123 FORMAT.	01541	01640	01721	02033	02161	02234
	00540					
P00546 G6000C0.	00604					
P00616 G6000C1.	00657					
P00666 G6000C2.	00724					
P00735 G6000C3.	00771					
P01011 G6000C4.	01056					
P01064 G6000C5.	01065					
P01101 G6000C6.	01170					
P01176 G6000C7.	01176					
P01215 G6000C8.	01245					
P01253 G6000C9.	01253					
P01273 G6000C10.	01300					
P01320 G6000C11.	01340					
P01353 G6000C12.	01374					
P01407 G6000C13.	01430					
P01443 G6000C14.	01456					
P01476 G6000C15.	01521					
P01534 G6000C16.	01554					
P01574 G6000C17.	01574					
P01606 G6000C18.	01647					
P01663 G6000C19.	01706					
P01714 G6000C20.	01754					
P01766 G6000C21.	01773					
P02013 G6000C22.	02047					
P02061 G6000C23.	02055					
P02105 G6000C24.	02130					
P02136 G6000C25.	02136					
P02156 G6000C26.	02251					
P02257 G6000C27.	02257					
P02267 G6000C28.	02267					
P02310 G6000C29.	02267					

5.ATS

SETIL

11

PAGE NO.

ED 0

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P02331	GG00036.	02321	00776	00777	01001	01046	01046	01072	01074	01075
P02345	GG00037.	02334	00701	01204	01224	01231	01260	01261	01263	01305
P02357	I	01203	01306	01310	01331	01344	01345	01347	01357	01361
		01305	01371	01400	01401	01415	01421	01425	01434	01435
		01437	01463	01464	01503	01512	01516	01525	01526	01530
		01561	01562	01564	01655	01675	01675	01731	01733	01742
		02041	02144	02146	02162	02163				
P00505	IF000C1.									
P01141	IF000C2.									
P01667	IF000C3.									
P01671	IF000C4.									
P02230	IF000C5.									
P00000	IFTPMNT									
P02360	IGTC.									
P02361	IMP									
P00023	IMCARG									
P00003	INCARD									
		00766	01024	01132	01145	01234	01242	01275	01546	01552
		01631	01703	01771	02126					
		01102	01321	01551	01677	02231	02236	02245		
		00613	00622	00630	00633	00641	00650	00655	00662	00663
		00667	00674	00705	01000	01075	01107	01113	01126	01137
		01141	01154	01205	01225	01262	01307	01324	01333	01346
		01353	01360	01364	01402	01407	01414	01420	01436	01444
		01465	01505	01527	01563	01577	01607	01614	01640	01643
		01700	01724	01726	01730	01744	01757	02002	02030	02037
		02052	02074	02113	02161	02165	02224	02234	02276	
C00007	INCOMW									
C00002	INDATE									
C00003	INFORM									
C00000	INIDENT									
X00003	INITAP									
P02350	INITIAL.									
C00006	INLENGTH									
C00001	INRUNNC									
C00004	INSECR									
C00010	INTAPE									
C00005	INTIME									
P00035	ISETS									
C00016	ISETSIZ									
P02362	IT									
C00000	ITP									
		00117	01021	01022	01635					
		00742	00755	00571	00571	00703	00716	00716	00736	00754
		00754	01611	01622	01622	02014	02014	02025	02107	02110
		02141	02121	02170	02170	02200	02204	02210	02210	02221
		02221	02226	02226	00727	00741	00744	00756	00762	00762
		00705	00706							
		00647	01015							
		00583	00584							
		00566								
C00000	ITWORD									
P00603	LO									
P00567	LO0001									
P00570	LO0002									
P00624	LO0003									
P00625	LO0004									
P00627	LO0005									
P00630	LO0006									
P00632	LO0007									
P00633	LO0008									

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PU0635 .1000C9
PU0636 .100010 00624
PU0645 .100011 00644
PU0647 .100012 00644
PU0652 .100013
PU0653 .100014 00651
PU0676 .100015
PU0700 .100016 00675
PU0714 .100017 00712
PU0715 .100018 00713
PU0752 .100019 00750
PU0753 .100020 00751
PU1021 .100021 01020
PU1023 .100022
PU1055 .100023
PU1056 .100024 01054
PU1111 .100025
PU1113 .100026 01110
PU1115 .100027
PU1117 .100028 01114
PU1121 .100029
PU1123 .100030 01120
PU1125 .100031
PU1126 .100032 01124
PU1130 .100033
PU1131 .100034 01127
PU1143 .100035 01140
PU1144 .100036 01142
PU1160 .100037 01156
PU1162 .100038 01157
PU1167 .100039
PU1170 .100040 01166
PU1223 .100041
PU1224 .100042 01222
PU1227 .100043
PU1230 .100044 01226
PU1327 .100045
PU1330 .100046 01326
PU1355 .100047
PU1356 .100048 01354
PU1363 .100049
PU1364 .100050 01362
PU1411 .100051
PU1412 .100052 01410
PU1417 .100053
PU1420 .100054 01416
PU1446 .100055
PU1447 .100056 01445
PU1451 .100057
PU1452 .100058 01450
PU1510 .100059
PU1512 .100060 01507
PU1540 .100061
PU1541 .100062 01537

P01544	.100063				
P01545	.100064	01543			
P01620	.100065	01616			
P01621	.100066	01617			
P01637	.100067	01636			
P01640	.100068	01636			
P01642	.100069				
P01643	.100070	01641			
P01645	.100071				
P01646	.100072	01644			
P01673	.100073	01666	01670		
P01674	.100074	01672			
P01737	.100075				
P01740	.100076	01736			
P01753	.100077				
P01754	.100078	01752			
P02023	.100079	02021			
P02024	.100080	02022			
P02046	.100081				
P02047	.100082	02045			
P02117	.100083	02115			
P02120	.100084	02116			
P02176	.100085	02174			
P02177	.100086	02175			
P02240	.100087	02235			
P02241	.100088	02237			
P02246	.100089				
P02247	.100090	02245			
P02321	.100091	02317			
P02331	.100092	02320			
P02334	.100093				
P02345	.100094	02332	02333		
P01016	.11				
P01245	.185	01243			
P01253	.186	01146	01235		
P02216	.1920	02315			
P00622	.20	00621			
P01064	.200	01055	01167	01215	01637 02127
P01101	.2001	01701			
P01702	.201	01642	01645	01673	
P01677	.202				
P02125	.203	02046	02117		
P01674	.204	02127			
P02065	.209	02063			
P02105	.210	02064			
P00674	.22	00652			
P01502	.2250	01544			
P00653	.23				
P01045	.240	01041			
P00650	.24	00636			
P01050	.241				
P01335	.242	01327			
P01353	.243	01334			
P01371	.244	01363			

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PU1407 .245
 PU1425 .246
 PU1545 .247
 PU1444 .248
 PU1516 .250
 PU1534 .251
 PU1551 .261
 PU1574 .262
 PU1554 .263
 PU1706 .271
 PU1714 .272
 PU0721 .32
 PU0765 .33
 PU1773 .338
 PU0613 .339
 PU2041 .350
 PU2036 .351
 PU2031 .352
 PU1042 .41
 PU1031 .42
 PU1032 .43
 PU1033 .44
 PU1037 .45
 PU0576 .456
 PU1723 .567
 PU1456 .68
 PU1500 .69
 PU1633 .71
 PU2167 .72
 PU0637 .724
 PU2164 .73
 PU1626 .777
 PU0771 .78
 PU1011 .79
 PU1107 .80
 PU1274 .81
 PU1416 .82
 PU1230 .83
 PU1236 .84
 PU1150 .850
 PU1137 .85
 PU1300 .88
 PU1322 .89
 PU2130 .90
 PU2157 .91
 PU2345 .92
 PU2313 .93
 PU2311 .94
 PU2247 .95
 PU2316 .96
 PU0466 .100000
 PU0123 .100
 PU0467 .100001
 PU0470 .100002

01370
 01417
 01355
 01130
 01510
 01515
 01547
 01147
 01553
 01704
 01705
 00714
 00752
 01772
 01772
 01737
 00223
 01025
 01026
 01027
 01027
 01030
 00567
 01454
 01455
 01632
 01632
 00632
 01620
 00767
 00770
 01106
 01133
 01134
 01223
 01143
 01125
 01276
 01277
 00621
 01106
 02176
 02310
 02246
 02240
 00550
 00607
 00556
 00572

01411 01424 01443 01446 01451 01540 02166

01435 01244 01273 01550 01553

01753

01036

01031 01032

00635

01135 01135

01227

01136

00624 00627

SS-15	SETID		11/24/71	ED	0	PAGE	NC.	15
P00424	00131	01461						
P00441	00132	01201						
P00453	00160	01557						
P02363	J	01720	01740	01741	01744	01745	01746	01750
P02364	K	01721	02434	02434	02442	02442	02443	02444
P02365	L	02000	02001	02003	02072	02073	02075	02217
P02366	M	02274	02275	02277				
C00003	MYCOMP							
C00000	MYFCMW							
C00000	MYFDEAT	00551	00551	00557	00557	00573	00573	
C00002	MYLNGTH							
C00001	MYSECR							
P00121	NAT	00801	00670	00672	00673	01042	01043	01336
C00000	NCSN	02142	02152					
		00743	00743	00761	00761	01006	01270	01315
		01727	01727	02010	02102			
P00120	N014	00600	00677	01013				
P00122	NEND	00802	01112	01116	01122	01630	02160	
P02367	NER	02215	02247	02250	02316	02331	02340	
P02370	NEWF	01634	01664	02125				
P02371	NEX	01155	01155	01161	01162			
C00000	NCPRIAT	00546	00547					
C00015	NCPSET	01017	01023	01023	01123	01123	01131	01447
C00011	NCUT1	00554	00554	00566	00702	00702	00735	00735
		02107	02167	02167	02203	02203	02220	02220
		00562	00562	00565	00565	00570	00570	00711
C00012	NCUT2	00747	00753	00753	01615	01615	01621	01621
		02114	02114	02120	02120	02173	02173	02177
		02225						
C00001	NOWDATE							
C00000	NOWRUNC							
C00002	NOWTIME							
C00013	NPR	00765	00765	01053	01053	01144	01144	01165
		01274	01452	01452	01545	01545	01702	01702
P02372	NREC	02214	02232	02233	02263	02425	02342	01232
C01750	NS	00670	00671	01325	01326	01361	01362	01415
		02147						
C00000	NSAVE	01051	01051	01331	01332	01333	01334	01365
		01422	01423	01424	01512	01513	01514	01515
		01746	01747					
		00577	00642	00643	00646	00730	01003	01037
P00117	NSET	01160	01163	01207	01236	01237	01264	01311
		01717	01760	02004	02052	02076		
P02373	NSETC1	01034	01221					
P02374	NSETC2	01035	01225					
P02375	NTIMES	01501	01504	01534	01535	01536	01541	
C00014	NUM	00731	00731	01004	01004	01011	01011	01012
		01211	01211	01240	01241	01266	01266	01313
		01567	01602	01602	01626	01626	01627	01634
		01762	02006	02006	02031	02031	02032	02055
		02105	02106					
X00005	NUMGET	00637	00653	01152				
P02376	NUM	02301	02302	02304				
X00002	Q8UDICT*	00000	00000					

X00013	GBQIFECF	00617	01104						
X00020	UNSLNGL.	02306							
X00012	MDARMAY	02222	J2227						
P00534	SETIO	00534							
X00011	SETREAO	02205	02211						
X00004	SETWHIT	00560	00574						
X00017	SLI.	00611							
X00015	STM.	00541	00772	01171	01177	01246	01301	01375	01431
		01457	01522	01707	01774	02066	02137	02260	02270
		02322	02335						
		02171	02201						
X00010	TERMTAP	00544	00614	00733	01007	01062	01174	01251	01271
X00001	THEND.	01316	01351	01405	01474	01532	01604	01712	01764
		02011	02057	02103	02154	02255	02306	02327	02343
P01336	TS00011.								
P01372	TS00013.								
P01426	TS00015.								
P01517	TS00020.								
P02042	TS00026.								
P02152	TS00032.								
X00014	TSH.	02145							
C00000	TWCRD	00605	01650						
X00007	WRARRAY								
X00006	WRWCRD	01612	01623	02015	02111	02122			
P00702	WS00001.	00707	00717	00737	00757	00763			
P00777	WS00002.	00723							
P01050	WS00003.	01002							
P01073	WS00004.	01052							
P01204	WS00005.	01076							
P01220	WS00006.	01207							
P01261	WS00007.	01232							
P01306	WS00010.	01264							
P01324	WS00011.	01311							
P01345	WS00012.	01337	01337						
P01360	WS00013.	01350							
P01401	WS00014.	01373	01373						
P01414	WS00015.	01404							
P01435	WS00016.	01427	01427						
P01464	WS00017.	01440							
P01504	WS00020.	01467							
P01526	WS00021.	01520	01520						
P01562	WS00022.	01531							
P01655	WS00023.	01565							
P01677	WS00024.	01660							
P01723	WS00025.	01701							
P01733	WS00026.	01725							
P02001	WS00027.	02043	02043						
P02036	WS00030.	02004							
P02073	WS00031.	02040							
P02146	WS00032.	02076							
P02164	WS00033.	02153	02153						
P02220	WS00034.	02166							
P02243	WS00035.	02314							
P02275	WS00036.	02312							
		02300							

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P02302 MS00037. 04305
00575 SYMBOLS

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```

PROGRAM BASEMOD
CSUBR  BASEMOD  10NOV70 *****
C
C THE MAIN FUNCTION OF PROGRAM BASEMOD IS TO EFFECT THE ALTERATION OF
C THE CONTENT OR CHARACTERISTICS OF A DATA BASE IN ORDER TO ADAPT IT
C TO THE SPECIFIC SCENARIO FOR WHICH THE PLAN IS BEING DEVELOPED. THE
C PROGRAM MAY BE EXERCISED EITHER AFTER PROGRAM QUIKBASE OR AFTER
C PROGRAM INDEXER. IF IT IS EXERCISED IN THE FORMER POSITION,
C SUBROUTINE DBMOD WILL CONTROL THE INFORMATION PROCESSING, WHILE IF IT
C IS EXERCISED IN THE LATTER, SUBROUTINE INDMOD WILL BE THE CONTROLLING
C SUBROUTINE. DETAILS CONCERNING FILE UTILIZATION AND OTHER NECESSARY
C INFORMATION ARE CONTAINED IN THE TWO CONTROLLING SUBROUTINES.
C
C *****
C
C READ 100,IALT
C 100 FORMAT(110)
C
C IS THE PROGRAM TO BE RUN POST-QUIKBASE OR POST-INDEXER
C
C IF (IALT)200,200,300
C
C RUN POST-QUIKBASE
C
C 200 CALL DBMOD
C GO TO 400
C
C RUN POST-INDEXER
C
C 300 CALL INDMOD
C 400 CONTINUE
C PRINT 7777
C WRITE(4,7777)
C 7777 FORMAT ('3M ***** PROCESSOR BASEMOD COMPLETED *****')
C
C *****

```

1000
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
13000
14000
15000
16000
17000
18000
19000
20000
21000
22000
23000
24000
25000
26000
27000
28000
29000
30000
31000
32000
33000
34000
35000
36000
37000

5.4TS BASEMOD

PROGRAM LENGTH
ENTRY POINTS BASEMOD
EXTERNAL SYMBOLS

IDENT

00064
00017

BASEMOD

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ORCENTRY
THEND.
0000ICT.
DBMOD
INDMOD
ISH.
SYH.
QINSINGL.

5.4TS BASEMOD

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P00017 BASEMOD	00017					
P00061 CNVRTI.	00030					
P00003 CRFMT.	00034	00057				
X00004 DRMOD	00036					
P00001 DICT.	00021	00023	00033	00037	00042	00045
P00062 ENDING.	00057	00026	00033	00037	00042	00045
P00000 EXIT.	00062					
P00003 FORMAT.						
P00034 GG00000.	00024					
P00051 GG00001.	00043					
P00057 GG00002.	00051					
P00063 IALT	00031	00034				
X00005 INDMOD	00041					
P00036 .200	00034	00035				
P00041 .300	00035					
P00043 .400	00040					
P00003 .100	00027					
P00006 .7777	00046	00054				
X00003 QRODICT.	00000	00020				
X00001 QROENTRY	00022					
X00010 QNSINGL.	00060					
X00007 STM.	00044	00052				
X00002 TEND.	00032	00047				
X00006 TSM.	00025	00055				

00030 SYMBOLS

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```

200 PRINT 103, NAMZ(M,N,L), NUMZ(M,N,L), VALZ(M,N,L)
103 FORMAT (30X, A8, 2X, I10, 2X, F15.5)
CLASSVAL = CLASSVAL + VALZ(M,N,L)
NUM = NUM + NUMZ(M,N,L)
201 CONTINUE
PRINT 104, NUM, CLASSVAL
104 FORMAT (30X, B(1M-), 2X, I0(1M-), 2X, I5(1M-), /
* 30X, 3HALL, 7X, I10, 2X, F15.5)
50 CONTINUE
RETURN
END

```

61000
62000
63000
64000
65000
66000
67000
68000
69000
70000
71000

S.ATS ADDVAL

PROGRAM LENGTH
ENTRY POINTS

ADDVAL
PRNTVAL

EXTERNAL SYMBOLS

07644
07233
07335

IDENT

ADDVAL

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TWEND.
ORODICT.
STM.
QNSINGL.

5.4TS	ADDVAL	12/21/71	ED	0	PAGE NO.	4
P07233	ADDVAL					
P07561	BEGIN.					
P07637	CLASSVAL					
P07450	CAVRT1.					
P07122	CRFMT.					
P00001	GICT.					
P07621	ENDING.					
P00000	EXIT.					
P07122	FORMAT.					
P07274	FP00001.					
P07310	FP00002.					
P07324	FP00003.					
P07330	FP00004.					
P07536	FP00005.					
P07551	FP00006.					
P07635	GETPL.					
P07625	GETPU.					
P07356	GG00000.					
P07364	GG00001.					
P07377	GG00002.					
P07421	GG00003.					
P07440	GG00004.					
P07122	IC					
P07451	IN00001.					
P07452	IN00002.					
P07453	IN00003.					
P07454	IN00004.					
P07455	IN00005.					
P07121	INITIAL.					
P07562	INITIAL.					
P07122	IS					
P07122	IT					
P07241	.10					
P07262	.11					
P07407	.200					
P07271	.20					
P07425	.201					
P07277	.21					
P07274	.23					
P07127	.25					
P07314	.30					
P07440	.50					
P07122	..100000					
P07123	..100001					
P07124	..100002					
P07125	..100003					
P07126	..100004					
P07127	..101					
P07165	..102					
P07172	..103					
P07202	..104					
P07146	..120					
P07122	JC					

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ADRVAL

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P07600	L	07253	07302	07305	07314	07402	07425	07525				
P07061	LLSIDE	07342	07343	07353	07321							
P07023	LP	07251	07300	07320	07316							
P07641	M	07243	07266	07300	07316	07344	07352	07443	07470			
P07642	N	07246	07263	07306	07322	07365	07440	07506				
P07053	NAMCL	07252	07272	07276	07374							
P00003	NAMZ	07257	07312	07326	07414							
P07643	NUM	07401	07423	07424	07434							
P02263	NUMZ	07260	07332	07333	07405	07415	07424					
P07462	P00000.U	07465										
P07476	P00001.U	07503										
P07516	P00002.U	07522										
P07576	PF00002.	07573										
P07602	PF00003.	07577										
P07610	PF00004.	07603										
P07614	PF00005.	07611										
P07620	PF00006.	07614										
P07335	PRNTVAL	07335										
X00002	QR001CT.	00000	07234	07336								
X00004	QNSINGL.	07447										
P07460	RELCUN..	07561										
X00003	STM.	07347	07357	07370	07410	07431						
X00001	THEND.	07354	07362	07375	07417	07436						
P07316	TS00004.	07304										
P07467	UP00000.	07244	07267	07301	07345	07444	07443	07470	07471	07472	07475	07475
P07505	UP00001.	07247	07264	07307	07323	07366	07441	07501	07504	07507	07510	07515
		07515										
P07524	UP00002.	07254	07303	07315	07403	07426	07520	07525	07526	07527	07533	07533
P07535	UP00003.	07456	07537	07540	07541	07545	07546					
P07550	UP00004.	07457	07552	07553	07554	07560	07560					
P07122	V	07331										
P04543	VALZ	07261	07330	07332	07416	07422						
P07245	WS00001.	07270										
P07250	WS00002.	07265										
P07256	WS00003.	07262										
P07305	WS00004.	07317										
P07346	WS00005.	07445										
P07367	WS00006.	07442										
P07404	WS00007.	07427										
	00133 SYMROLS											

[illegible]

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IDESIG(J) = LDES

C INCREMENT THE NUMBER OF TARGETS OF THIS TYPE (IN THE APPROPRIATE
C REGION) BY ONE
C

11 CONTINUE
DESIGNO(J,IREG) = DESIGNO(J,IREG) + 1
RETURN
END

52000
53000
54000
55000
56000
57000
58000
59000
60000

5.4TS COUNTDES

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

COUNTDES

IDESIGS
NODESIGS

EXTERNAL SYMBOLS

30216
00010

03720
00004

IDENT

COUNTDES

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THEND.
GRADUCT.
DEC.
ONSTINGL.

5.4TS COUNTDOES

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P00136 BEGIN.
P00106 CNVRTI.
P00010 COUNTDOES
P00003 CRFMT.
X00003 DEC.
X000764 DESIGNO
P00001 DICT.
P00173 ENDING.
P00000 EXIT.
P00003 FORMAT.
P00017 FP00001.
P00031 FP00002.
P00040 FP00003.
P00044 FP00004.
P00047 FP00005.
P00073 FP00006.
P00127 FP00007.
P00207 GEYPL.
P00177 GEYPU.
P00026 GG00000.
P00000 IDESIGS
P00003 II
P00107 IN00003.
P00137 INITIAL.
P00003 IREG
P00031 .1
P00101 .11
P00064 .20
P00035 .2
P00040 .3
P00044 .4
P00047 .5
P00003 .1.100
P00211 J
P00212 KDESIG
P00213 KK
C00002 KWIN
P00214 LDES
P00215 MAX
P00003 MYDESIG
C00000 N0DESIGS
P00113 P00000.0
P00155 PF00002.
P00160 PF00003.
P00172 PF00004.
X00002 Q0001CT.
X00004 QNSINGL.
P00111 RELCOM.
X00001 TEND.
P00066 TS00001.
P00117 UP00000.
P00126 UP00002.
P00060 VS00001.
00065 SYMBOLS

00172 00200 00204
00020
00022
00102 00103
00016 00025
00104 00137
00142 00143
00140 00140 00141 00141
00157
00164 00165
00166 00167
00170 00171
00151 00152
00153 00154
00162 00163
00144 00155
00147 00160 00203
00014 00062 00077 00100
00047 00073
00101 00134
00013 00123
00032 00041 00045 00127
00063
00101 .11
00062 .20
00027
00036 00037
00034 00043
00017
00055 00061 00064
00023 00026 00035
00051 00054
C00002 00050 00050
00021 00060 00076
00054 00066 00070
00017 00052 00052
00003 00074 00074 00075
00115
00156
00161 00011
00000
00105
00136
00024
00057
00056
00033
00067

00124 00124 00124
00134 00134 00134
00124 00124 00124
00134 00134 00134

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SUBROUTINE DBMOD
  CSUBR DBMOD 3NOV71 *****
  CDECLAREX COMMON/PROCESS/NI,NV,NC,INITEN(100),VALUE(500),DEF(500),(6,08(500))
  TYPE INTEGER VALUE
  TYPE LOGICAL DEF,LGLOB
  COMMON/EDIT/TERM/IS,TERM
  COMMON/EDIT/TAPE/INTP,NOUT,ITOUT(10),JOUT
  EQUIVALENCE(CLASS,VALUE( 1))
  TYPE INTEGER CLASS
  EQUIVALENCE(TYPE,VALUE( 2))
  TYPE INTEGER TYPE
  EQUIVALENCE(SIDE,VALUE( 3))
  TYPE INTEGER SIDE
  EQUIVALENCE(CNTRYOWN,VALUE( 4))
  TYPE INTEGER CNTRYOWN
  EQUIVALENCE(CNTRYLOC,VALUE( 5))
  TYPE INTEGER CNTRYLOC
  EQUIVALENCE(FUNCTION,VALUE( 6))
  TYPE INTEGER FUNCTION
  EQUIVALENCE(SITENO,VALUE( 7))
  TYPE INTEGER SITENO
  EQUIVALENCE(SITEMO,VALUE( 8))
  TYPE INTEGER SITEMO
  EQUIVALENCE(NAME,VALUE( 9))
  TYPE INTEGER NAME
  EQUIVALENCE(SONNO,VALUE(10))
  TYPE INTEGER SONNO
  EQUIVALENCE(FLTNO,VALUE(11))
  TYPE INTEGER FLTNO
  EQUIVALENCE(RENO,VALUE(12))
  TYPE INTEGER RENO
  EQUIVALENCE(VULN,VALUE(13))
  TYPE INTEGER VULN
  EQUIVALENCE(H1,VALUE(14))
  TYPE INTEGER H1
  EQUIVALENCE(H2,VALUE(15))
  TYPE INTEGER H2
  EQUIVALENCE(WACNO,VALUE(16))
  TYPE INTEGER WACNO
  EQUIVALENCE(CATCODE,VALUE(17))
  TYPE INTEGER CATCODE
  EQUIVALENCE(MAJOR,VALUE(18))
  TYPE INTEGER MAJOR
  EQUIVALENCE(MINOR,VALUE(19))
  TYPE INTEGER MINOR
  EQUIVALENCE(DESIG,VALUE(20))
  TYPE INTEGER DESIG
  EQUIVALENCE(TASK,VALUE(21))
  TYPE INTEGER TASK
  EQUIVALENCE(POSTURE,VALUE(22))
  TYPE INTEGER POSTURE
  EQUIVALENCE(INDEXNO,VALUE(23))
  TYPE INTEGER INDEXNO
  EQUIVALENCE(NOPERSO,VALUE(24))
  TYPE INTEGER NOPERSO
  EQUIVALENCE(NMPSITE,VALUE(25))
  TYPE INTEGER NMPSITE

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EQUIVALENCE(NOALERT ,VALUE( 25))
TYPE INTEGER NOALERT
EQUIVALENCE(NOINCOM ,VALUE( 26))
TYPE INTEGER NOINCOM
EQUIVALENCE(LINK ,VALUE( 27))
TYPE INTEGER LINK
EQUIVALENCE(ZONE ,VALUE( 28))
TYPE INTEGER ZONE
EQUIVALENCE(AREA ,VALUE( 29))
TYPE REAL AREA
EQUIVALENCE(LAT ,VALUE( 30))
TYPE REAL LAT
EQUIVALENCE(LONG ,VALUE( 31))
TYPE REAL LONG
EQUIVALENCE(LEGNO ,VALUE( 32))
TYPE INTEGER LEGNO
EQUIVALENCE(RESERVE ,VALUE( 33))
TYPE INTEGER RESERVE
EQUIVALENCE(BLEGNO ,VALUE( 34))
TYPE INTEGER BLEGNO
EQUIVALENCE(NEXTZONE ,VALUE( 35))
TYPE INTEGER NEXTZONE
EQUIVALENCE(IPOINT ,VALUE( 36))
TYPE INTEGER IPOINT
EQUIVALENCE(ITEIN ,VALUE( 37))
TYPE REAL ITEIN
EQUIVALENCE(TEOUT ,VALUE( 38))
TYPE REAL TEOUT
EQUIVALENCE(POP ,VALUE( 39))
TYPE REAL POP
EQUIVALENCE(IGIN ,VALUE( 40))
TYPE INTEGER IGIN
EQUIVALENCE(MVA ,VALUE( 41))
TYPE INTEGER MVA
EQUIVALENCE(RADIUS ,VALUE( 42))
TYPE REAL RADIUS
EQUIVALENCE(VAL ,VALUE( 43))
TYPE REAL VAL
EQUIVALENCE(VALU ,VALUE( 44))
TYPE REAL VALU
EQUIVALENCE(MISDEF ,VALUE( 45))
TYPE INTEGER MISDEF
EQUIVALENCE(IARDEF ,VALUE( 46))
TYPE INTEGER IARDEF
EQUIVALENCE(TARDEFMI ,VALUE( 47))
TYPE INTEGER TARDEFMI
EQUIVALENCE(TARDEFLO ,VALUE( 48))
TYPE INTEGER TARDEFLO
EQUIVALENCE(ICLASS ,VALUE( 49))
TYPE INTEGER ICLASS
EQUIVALENCE(ITYPE ,VALUE( 50))
TYPE INTEGER ITYPE
EQUIVALENCE(IREG ,VALUE( 51))
TYPE INTEGER IREG
EQUIVALENCE(IPREFUEL ,VALUE( 52))
TYPE INTEGER IPREFUEL

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EQUIVALENCE(IOTHR ,VALUE( 53))
TYPE INTEGER IOTHR
EQUIVALENCE(IGROUP ,VALUE( 34))
TYPE INTEGER IGROUP
EQUIVALENCE(ICOMPLEX,VALUE( 55))
TYPE INTEGER ICOMPLEX
EQUIVALENCE(ITGT ,VALUE( 56))
TYPE INTEGER ITGT
EQUIVALENCE(IJTYPE ,VALUE( 57))
TYPE INTEGER IJTYPE
EQUIVALENCE(IMHTYPE ,VALUE( 58))
TYPE INTEGER IMHTYPE
EQUIVALENCE(ASHTYPE ,VALUE( 59))
TYPE INTEGER ASHTYPE
EQUIVALENCE(NDCCOYS ,VALUE( 60))
TYPE INTEGER NDCCOYS
EQUIVALENCE(FFRAC ,VALUE( 61))
TYPE REAL FFRAC
EQUIVALENCE(DELTA ,VALUE( 62))
TYPE REAL DELTA
EQUIVALENCE(FVALM1 ,VALUE( 63))
TYPE REAL FVALM1
EQUIVALENCE(T1 ,VALUE( 64))
TYPE REAL T1
EQUIVALENCE(T2 ,VALUE( 65))
TYPE REAL T2
EQUIVALENCE(T3 ,VALUE( 66))
TYPE REAL T3
EQUIVALENCE(FVALT1 ,VALUE( 67))
TYPE REAL FVALT1
EQUIVALENCE(FVALT2 ,VALUE( 68))
TYPE REAL FVALT2
EQUIVALENCE(MINKILL ,VALUE( 69))
TYPE REAL MINKILL
EQUIVALENCE(MAXKILL ,VALUE( 70))
TYPE REAL MAXKILL
EQUIVALENCE(MAXFRACV,VALUE( 71))
TYPE REAL MAXFRACV
EQUIVALENCE(MAXFACTV,VALUE( 72))
TYPE REAL MAXFACTV
EQUIVALENCE(YIELD ,VALUE( 73))
TYPE REAL YIELD
EQUIVALENCE(NOBOMB1 ,VALUE( 74))
TYPE INTEGER NOBOMB1
EQUIVALENCE(NOBOMB2 ,VALUE( 75))
TYPE INTEGER NOBOMB2
EQUIVALENCE(NASMS ,VALUE( 76))
TYPE INTEGER NASMS
EQUIVALENCE(NCH ,VALUE( 77))
TYPE INTEGER NCH
EQUIVALENCE(PAYLOAD ,VALUE( 78))
TYPE INTEGER PAYLOAD
EQUIVALENCE(IREP ,VALUE( 79))
TYPE INTEGER IREP
EQUIVALENCE(PDUG ,VALUE( 80))
TYPE REAL PDUG

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EQUIVALENCE(CEP      ,VALUE( 81))
TYPE REAL CEP
EQUIVALENCE(RANGE    ,VALUE( 82))
TYPE REAL RANGE
EQUIVALENCE(RANGEDEC,VALUE( 83))
TYPE REAL RANGEDEC
EQUIVALENCE(HANGEREF,VALUE( 84))
TYPE REAL HANGEREF
EQUIVALENCE(SPEED    ,VALUE( 85))
TYPE REAL SPEED
EQUIVALENCE(SPDLO    ,VALUE( 86))
TYPE REAL SPDLO
EQUIVALENCE(SPOLC    ,VALUE( 87))
TYPE REAL SPOLC
EQUIVALENCE(SPDASH   ,VALUE( 88))
TYPE REAL SPDASH
EQUIVALENCE(REL      ,VALUE( 88))
TYPE REAL REL
EQUIVALENCE(PEN      ,VALUE( 89))
TYPE REAL PEN
EQUIVALENCE(ALERTDBL,VALUE( 90))
TYPE REAL ALERTDBL
EQUIVALENCE(NALRTDRL,VALUE( 91))
TYPE REAL NALRTDRL
EQUIVALENCE(ALERTDLY,VALUE( 92))
TYPE REAL ALERTDLY
EQUIVALENCE(NALRTDLY,VALUE( 93))
TYPE REAL NALRTDLY
EQUIVALENCE(CCREL    ,VALUE( 94))
TYPE REAL CCREL
EQUIVALENCE(TTOS     ,VALUE( 95))
TYPE REAL TTOS
EQUIVALENCE(TMOEL    ,VALUE( 96))
TYPE REAL TMOEL
EQUIVALENCE(TVUL     ,VALUE( 97))
TYPE REAL TVUL
EQUIVALENCE(TRETARG  ,VALUE( 98))
TYPE REAL TRETARG
EQUIVALENCE(PLART    ,VALUE( 99))
TYPE REAL PLART
EQUIVALENCE(ASRATE   ,VALUE( 100))
TYPE REAL ASRATE
EQUIVALENCE(PRART    ,VALUE( 101))
TYPE REAL PRART
EQUIVALENCE(PINC     ,VALUE( 102))
TYPE REAL PINC
EQUIVALENCE(PDES     ,VALUE( 103))
TYPE REAL PDES
EQUIVALENCE(PFPF     ,VALUE( 104))
TYPE REAL PFPF
EQUIVALENCE(PKMS     ,VALUE( 105))
TYPE REAL PKMS
EQUIVALENCE(ATTRLEG  ,VALUE( 106))
TYPE REAL ATTRLEG
EQUIVALENCE(ATTRCORR,VALUE( 107))
TYPE REAL ATTRCORR
EQUIVALENCE(KORSTYLE,VALUE( 108))
TYPE INTEGER KORSTYLE

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EQUIVALENCE(OEFRANGE,VALUE(109))
 TYPE REAL DEFRANGE
 EQUIVALENCE(HILOATTR,VALUE(110))
 TYPE REAL HILOATTR
 EQUIVALENCE(ATTRSUPP,VALUE(111))
 TYPE REAL ATTRSUPP
 EQUIVALENCE(INTYP2 ,VALUE(112))
 TYPE INTEGER INTYP2
 EQUIVALENCE(EFFECTNES,VALUE(113))
 TYPE REAL EFFECTNES
 EQUIVALENCE(ISITE ,VALUE(114))
 TYPE INTEGER ISITE
 EQUIVALENCE(IIVULN ,VALUE(115))
 TYPE INTEGER IIVULN
 EQUIVALENCE(NADBLI ,VALUE(116))
 TYPE REAL NADBLI
 EQUIVALENCE(NADBLR ,VALUE(117))
 TYPE REAL NADBLR
 EQUIVALENCE(ADBLI ,VALUE(118))
 TYPE REAL ADBLI
 EQUIVALENCE(NAREDEC,VALUE(119))
 TYPE INTEGER NAREDEC
 EQUIVALENCE(NRHDS ,VALUE(120))
 TYPE INTEGER NRHDS
 EQUIVALENCE(NTINT ,VALUE(121))
 TYPE INTEGER NTINT
 EQUIVALENCE(NTINT ,VALUE(122))
 TYPE REAL ADBLR
 EQUIVALENCE(TIMEN ,VALUE(123))
 TYPE REAL TIMEN
 EQUIVALENCE(TIME ,VALUE(124))
 TYPE REAL TIME
 EQUIVALENCE(DELAY ,VALUE(125))
 TYPE REAL DELAY
 EQUIVALENCE(IALERT ,VALUE(126))
 TYPE INTEGER IALERT
 EQUIVALENCE(NNTYPE ,VALUE(127))
 TYPE INTEGER NNTYPE
 EQUIVALENCE(INDV ,VALUE(128))
 TYPE INTEGER INDV
 EQUIVALENCE(NTAR ,VALUE(129))
 TYPE INTEGER NTAR
 EQUIVALENCE(EVENT ,VALUE(130))
 TYPE INTEGER EVENT
 EQUIVALENCE(EVENTN ,VALUE(131))
 TYPE INTEGER EVENTN
 EQUIVALENCE(PLACE ,VALUE(132))
 TYPE INTEGER PLACE
 EQUIVALENCE(PLACEN ,VALUE(133))
 TYPE INTEGER PLACEN
 EQUIVALENCE(IALT ,VALUE(134))
 TYPE INTEGER IALT
 EQUIVALENCE(NMPNS ,VALUE(135))
 TYPE INTEGER NMPNS
 EQUIVALENCE(NTARG ,VALUE(136))
 TYPE INTEGER NTARG

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EQUIVALENCE(MCODE, VALUE( 137))
TYPE INTEGER MCODE
EQUIVALENCE(CCODE, VALUE( 138))
TYPE INTEGER CODE
EQUIVALENCE(BCODE, VALUE( 139))
TYPE INTEGER BCODE
EQUIVALENCE(IRUD, VALUE( 140))
TYPE INTEGER IRUD
EQUIVALENCE(AGX, VALUE( 141))
TYPE INTEGER AGX
EQUIVALENCE(AGY, VALUE( 142))
TYPE INTEGER AGY
EQUIVALENCE(DGX, VALUE( 143))
TYPE INTEGER DGX
EQUIVALENCE(DGY, VALUE( 144))
TYPE INTEGER DGY
EQUIVALENCE(AHOB, VALUE( 145))
TYPE INTEGER AHOB
EQUIVALENCE(DHOB, VALUE( 146))
TYPE INTEGER DHOB
EQUIVALENCE(WHOTYPEN, VALUE( 147))
TYPE INTEGER WHOTYPEN
EQUIVALENCE(PRIMETAR, VALUE( 148))
TYPE INTEGER PRIMETAR
EQUIVALENCE(ICLASS, VALUE( 149))
TYPE INTEGER ICLASS
EQUIVALENCE(ITYPET, VALUE( 150))
TYPE INTEGER ITYPET
EQUIVALENCE(JTYPET, VALUE( 151))
TYPE INTEGER JTYPET
EQUIVALENCE(IJYPET, VALUE( 152))
TYPE INTEGER IJYPET
EQUIVALENCE(CLASS, VALUE( 153))
TYPE INTEGER CLASS
EQUIVALENCE(CNTYOWNT, VALUE( 154))
TYPE INTEGER CNTYOWNT
EQUIVALENCE(CNTYLOCT, VALUE( 155))
TYPE INTEGER CNTYLOCT
EQUIVALENCE(IPENMODE, VALUE( 156))
TYPE INTEGER IPENMODE
EQUIVALENCE(IRECMODE, VALUE( 157))
TYPE INTEGER IRECMODE
EQUIVALENCE(IATTACK, VALUE( 158))
TYPE INTEGER IATTACK
EQUIVALENCE(INAL, VALUE( 159))
TYPE INTEGER INAL
EQUIVALENCE(TAIM, VALUE( 160))
TYPE INTEGER TAIM
EQUIVALENCE(MMDS, VALUE( 161))
TYPE INTEGER MMDS
EQUIVALENCE(NPEN, VALUE( 162))
TYPE INTEGER NPEN
EQUIVALENCE(NDET, VALUE( 163))
TYPE INTEGER NDET
EQUIVALENCE(PARRIVE, VALUE( 164))
TYPE REAL PARRIVE

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EQUIVALENCE(ADEFZON,VALUE(165))
TYPE INTEGER ADEFZON
EQUIVALENCE(ADEFCHD,VALUE(166))
TYPE INTEGER ADEFCHD
EQUIVALENCE(INAINT,VALUE(167))
TYPE INTEGER INAINT
EQUIVALENCE(AZON1,VALUE(168))
TYPE INTEGER AZON1
EQUIVALENCE(AZON2,VALUE(169))
TYPE INTEGER AZON2
EQUIVALENCE(AZON3,VALUE(170))
TYPE INTEGER AZON3
EQUIVALENCE(CPACTY,VALUE(171))
TYPE INTEGER CPACTY
EQUIVALENCE(ICORR,VALUE(172))
TYPE INTEGER ICORR
EQUIVALENCE(ICORR,VALUE(173))
TYPE INTEGER ICORR
EQUIVALENCE(IDBL,VALUE(174))
TYPE INTEGER IDBL
EQUIVALENCE(IPKNAV,VALUE(175))
TYPE REAL IPKNAV
EQUIVALENCE(ITIME,VALUE(176))
TYPE INTEGER ITIME
EQUIVALENCE(PSASW,VALUE(177))
TYPE REAL PSASW
EQUIVALENCE(TPASW,VALUE(178))
TYPE REAL TPASW
EQUIVALENCE(TGSTAT,VALUE(179))
TYPE INTEGER TGSTAT
EQUIVALENCE(FLAG,VALUE(180))
TYPE INTEGER FLAG
EQUIVALENCE(NOPERSQ1,VALUE(181))
TYPE INTEGER NOPERSQ1
EQUIVALENCE(NOPERSQ2,VALUE(182))
TYPE INTEGER NOPERSQ2
EQUIVALENCE(NOPERSQ3,VALUE(183))
TYPE INTEGER NOPERSQ3
EQUIVALENCE(NUMDBL,VALUE(184))
TYPE INTEGER NUMDBL
EQUIVALENCE(EFECNES1,VALUE(185))
TYPE REAL EFECNES1
EQUIVALENCE(EFECNES2,VALUE(186))
TYPE REAL EFECNES2
EQUIVALENCE(VAL1,VALUE(187))
TYPE REAL VAL1
EQUIVALENCE(VAL2,VALUE(188))
TYPE REAL VAL2
EQUIVALENCE(TYPE1,VALUE(189))
TYPE INTEGER TYPE1
EQUIVALENCE(TYPE2,VALUE(190))
TYPE INTEGER TYPE2

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C THIS SUBROUTINE CONTROLS THE INFORMATION PROCESSING WHEN PROGRAM
C BASED50 IS RUN AFTER PROGRAM QUITBASE. THE REQUIRED INPUT AND OUTPUT

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```

C TAPES ARE AS FOLLOWS.
C
C INPUT TAPES
C   LTN 08 - QUICK8 TAPE
C   LTN 09 - OUTPUT TAPE FROM PROGRAM STACKER (OPTIONAL - ONLY
C   NEEDED IF ZONES OR TARDEFS ARE DESIRED)
C
C OUTPUT TAPES
C   LTN 01 - QKMOD8 TAPE
C
C *****
C   CUSE   ITP   140CT70 *****
C   COMMON/ITP/ITP
C   COMMON/NOPRINT/NOPRINT
C   COMMON/MYIDENT/MYIDENT
C   CEND   ITP *****
C
C CUSED IN SUBROUTINES DBMOD,STKRIN
C
C   COM: JN/ITP/ITP
C
C C ITP      NUMBER OF UNIT FROM WHICH DATA IS TO BE READ OR ONTO
C           WHICH DATA IS TO BE WRITTEN
C
C   COMMON/NOPRINT/NOPRINT
C
C C NOPRINT  VARIABLE USED BY FILEHANDLER, #1 IF MESSAGES ARE TO
C           BE PRINTED WHEN A FILE IS READ, OTHERWISE, NC
C           MESSAGES ARE PRINTED
C
C   COMMON/MYIDENT/MYIDENT
C
C C MYIDENT  TAPE LABEL
C
C *****
C   CUSE   CUTIGW 190CT70 *****
C           COMMON/CUTIGW/JCOUNTRY(25,2),MINIGW(25,2),NOIGWS(1,2)
C           DIMENSION INSIDE(2)
C           TYPE INTEGER PLANTEST
C           DIMENSION PLANTEST(2),ZPOP(2),NZONET(2),NTARIT(2)
C   CEND   CUTIGW *****
C
C CUSED IN SUBROUTINE DBMOD
C
C   COMMON/CUTIGW/JCOUNTRY(MNC,NS),MINIGW(MNC,NS),NOIGWS(1,NS)
C
C C MNC      MAX. NUMBER OF COUNTRIES IN LIST
C C NS       NUMBER OF SIDES
C C I        DUMMY CONSTANT
C C JCOUNTRY(MNC,NS) LIST OF COUNTRIES TO BE ASSIGNED VALUES OF MINIGW
C C MINIGW(MNC,NS) LIST OF MINIMUM ALLOWABLE VALUES OF ATTRIBUTE 10IN
C C NOIGWS(1,NS) NUMBER OF COUNTRIES IN THE LIST FOR EACH SIDE

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C *****
C CUSE IDESIGS 14OCT70 *****
C COMMON/IDSIGS/IDSIGS(500),DESIGNO(500,3)
C COMMON/NODESIGS/NODESIGS(2),KKMIN(2)
C TYPE INTEGER DESIGNO
CEND IDESIGS *****
C C USED IN SUBROUTINES DBMOD, COUNTDES
C C COMMON/IDSIGS/IDSIGS(NT),DESIGNO(NT,NR)
C C NT TOTAL NUMBER OF TYPES FOR BOTH SIDES COMBINED
C C NR NUMBER OF REGIONS
C C IDESIGS(NT) FIRST TWO LETTERS OF TARGET DESIGNATOR CODE
C C DESIGNO(NT,NR) ARRAY CONTAINING SUMMARIES BY REGION AND TYPE OF
C C ITEMS KEPT
C C COMMON/NODESIGS/NODESIGS(NS),KKMIN(NS)
C C NS NUMBER OF SIDES
C C NODESIGS(NS) NUMBER OF DIFFERENT TYPES OF WEAPONS KEPT
C C KKMIN(NS) INTERNAL INDEX PARAMETER, =1 FOR BLUE, =251 FOR RED
C *****
C CUSE NRYPES 2NOV70 *****
C COMMON/NRYPES/NRYPES(2),NTYPES(2),NNTYPES(100),ALERTNO(100),
C 1 COMINNO(100)
CEND NRYPES *****
C C USED IN SUBROUTINES DBMOD, ROTYPES
C C COMMON/NRYPES/NRYPES(NS),NNTYPES(MNW),ALERTNO(MNW),COMINNO(MNW)
C C NS NUMBER OF SIDES
C C MNW MAX. NUMBER OF WEAPON TYPES PER REGION FOR BOTH SIDES
C C COMBINED WHICH WILL HAVE SCALING FACTORS
C C NRYPES(NS) NUMBER OF WEAPON TYPES FOR CURRENT SIDE FOR WHICH
C C NTYPES(NS) SAME AS NRYPES(NS), BUT IN ALPHANUMERIC FORMAT
C C NNTYPES(MNW) WEAPON TYPE OF (MNW)TH WEAPON TO BE SCALED
C C ALERTNO(MNW) NOALERT SCALE FACTOR FOR (MNW)TH WEAPON
C C COMINNO(MNW) NOINCOM SCALE FACTOR FOR (MNW)TH WEAPON
C *****
C C MYSIDE 14OCT70 *****
C COMMON/MYSIDE/MYSIDE
CEND MYSIDE *****
C C USED IN SUBROUTINES DBMOD, MYZONE
C C MYSIDE CURRENT SIDE
C

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C
  IF (NPRINT.EQ.5) PRINT) 7900,7902
7900 IPRINT=1
  IFREQ=NUMGET(JFREQ,8)
  IF (IFREQ.LE.0) 7901,7902
7901 IFREQ=1
7902 CONTINUE
  DO 600 I=1,2
    APOSTURE(I)=NTASK(I)=8H
    PLANTEST(I)=NOIGINS(I,I)=NZONEIT(I)=NTARIT(I)=0
    NNTYPES(I)=0
600 ZPOP(I)=XPOP(I)=0
    DO 601 I=1,2
      DO 601 J=1,25
        JCOUNTY(J,I)=8H
        MINIGW(J,I)=0
601 DO 475 I=1,200
      DESIGNO(I,1)=DESIGNO(I,2)=DESIGNO(I,3)=0
      LDESIGNO(I,1)=LDESIGNO(I,2)=LDESIGNO(I,3)=0
      LDESIGS(I)=8H
      INESIGS(I)=8H
475 DO 476 I=1,50
      ALERTNO(I)=COMINNO(I)=0.
476 NNTYPES(I)=8H
C
C READ IN DATE OF GAME
C
603 READ 500,NOATE,DATE
500 FORMAT(A8,2X,FA,2)
C
C IS THIS THE RIGHT CARD
C
C
  IF (NOATE.EQ.4) NOATE) 400,902
C
C READ FIRST OPTION CONTROL CARD
C
400 DO 504 I=1,2
  READ 501,NSIDE,LSIDE,LPOSTURE,LPLAN,LTASK
501 FORMAT(A8,2X,A8,12X,A8,12X,A8,12X,A8)
C
C TEST AND SET INDEX FOR CURRENT SIDE
C
  JSLOT=2
  ISLOT=1
  IF (NSIDE.EQ.4) NSIDE) 401,903
401 IF (LSIDE.EQ.3) HRED) 402,403
402 ISLOT=2
  JSLOT=1
C
C SET POSTURE FOR CURRENT SIDE
C
403 NPOSTURE(ISLOT)=NUMGET(LPOSTURE,8)
C
C SET TASK FOR CURRENT SIDE
C
  DECODE (8,60000,LTASK) NTASK(JSLOT)

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60000 FORMAT (I1)
C
C CHECK TO SEE IF PLAN IS INDIA OR ROMEO
C
C   IF (PLAN.EQ.5HINDIA) 404,4041
C
C CURRENT PLAN IS INDIA
C
C   404 PLANTEST(IJSLOT)=2
C       GO TO 406
C   4041 IF (PLAN.EQ.6HSTERRA) 4042,4043
C   4042 PLANTEST(IJSLOT)=1
C       GO TO 406
C   4043 IF (PLAN.EQ.5HROMEO) 4044,9051
C
C CURRENT PLAN IS ROMEO
C
C   4044 PLANTEST(IJSLOT)=3
C
C READ SECOND OPTION CONTROL CARD
C
C   406 READ 502,NPOP,XPPOP,NTARS,NZONES,MNIGIW
C   502 FORMAT(A8,2X,F9.4,12X,A8,12X,A8,12X,A8)
C IS THIS THE RIGHT CARD
C
C   IF (NPOP.EQ.THPCY=POPI 503,904
C
C SET PERCENT OF POP FOR CURRENT SIDE
C
C   503 XPOP(IJSLOT)=XPPOP
C       ZPOP(IJSLOT)=1.-XPPOP
C
C IF TARDEFS ARE TO BE CONSIDERED, SET NTARIT=1
C
C   IF (NTARS.EQ.3HYES) 5031,5032
C   5031 NTARIT(IJSLOT)=1
C
C IF ZONES ARE TO BE CONSIDERED, SET NZONEIT=1
C
C   5032 IF (NZONES.EQ.3HYES) 5033,5034
C   5033 NZONEIT(IJSLOT)=1
C   5034 NIGW=NUMGET(MNIGIW,8)
C
C IF THERE ARE COUNTRIES WITH VALUES OF MINIGIW, READ IN THE LIST NOW
C
C   IF (NIGIW) 5035,5038
C   5035 NOIGWS(I,JJSLOT)=NIGIW
C       DO 5037 I=1,NIGIW
C       READ 5036,JCOUNTRY(I,JJSLOT),NCNLOC
C   5036 FORMAT(A8,2X,A8)
C       M(NIGIW(I,JJSLOT)=NUMGET(NCNLOC,8)
C   5037 CONTINUE
C   5038 CONTINUE
C
C READ IN SCALING FACTORS FOR THE CALCULATION OF NOINCOM AND NOALERT

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```

C
C CALL ROTYPES(LSIDE)
C PRINT INPUT
C PRINT 10001
10001 FORMAT (1M1,28X,16HINPUT PARAMETERS/////)
10000 FORMAT (1X,3(A7,3X)/)
10010 FORMAT (1X,A4,5X,F8.2//)
10020 PRINT 10020,NSIDE,LSIDE,LPOSTURE,LPLAN,LTASK
10020 FORMAT (1X,A7,3X,A7,3X,7HPOSTURE,3X,A7,3X,4HPLAN,6X,A7,3X,4HTASK,
1 6X,A7//)
10030 PRINT 10030,NPOP,KPPOP,NTARS,NZONES,NNIGIW
10030 FORMAT (1X,A7,1X,F8.4,4X,6HTARDEF,4X,A7,3X,4HZONE,6X,A7,3X,
1 5HNNIGIW,5X,A7//)
10040 IF (NNIGIW .GT. 0) 11000,13000
11000 CONTINUE
DO 12000 MM=1,NNIGIW
11010 PRINT 11010,JCOUNTRY(MM,JSLOT),NCMLC
12000 CONTINUE
13000 CONTINUE
13010 PRINT 13010, MYPES(II)
13010 FORMAT (/,1X,7HNOTYPES,3X,A7//)
14000 IF (MYPES .GT. 0) 14000,20000
14000 CONTINUE
16000 IF (LSIDE .EQ. 4HBLUE) 16000,17000
16000 CONTINUE
MLOW=1
GO TO 18000
17000 CONTINUE
18000 MLOW=51
CONTINUE
MUP=MLOW+NRYPES(II)-1
DO 19000 KK=MLOW,MUP
18010 PRINT 18010, NRYPES(KK),CONINNO(KK),ALERTNO(KK)
19000 CONTINUE
20000 CONTINUE
504 CONTINUE
CALL PAGESKP
C
CSUBR DBMOD1 3NOV71 *****
C INITIALIZE INPUT AND OUTPUT ROUTINES
C
CALL INITAPE
IF (NTARIT(1).EQ.1.OR.NTARIT(2).EQ.1) 971,972
972 IF (NZONEIT(1).EQ.1.OR.NZONEIT(2).EQ.1) 971,974
971 ITP=9
C READ THE TAPE FROM PROGRAM STACKER
C
CALL STMRIN
974 CONTINUE

```

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```

C C NOUT EQUALS THE NUMBER OF OUTPUT TAPES
C C
C NOUT=1
C C JOUT EQUALS THE LOGICAL UNIT FOR OUTPUT
C C
C JOUT = 1
C C
C C LOAD ITOUT ARRAY WITH THE LOGICAL OUTPUT UNIT
C C
C ITOUT(1) = 1
C MYIDENT = 7HOKWOD08
C CALL INITEDIT(8)
C C ARING THE FIRST ITEM INTO MEMORY
C C
C CALL INPITEM
C C IS ITEM A TARGET
C C
C 50 CONTINUE
C IF (ICLASS.EQ. 0)9997,1
C C IS SIDE BLUE OR RED
C C
C 1 IF(SIDE.EQ.4HBLUE) 2,3
C C SIDE IS BLUE
C C
C 2 IPOST=1
C GO TO 10
C C SIDE IS RED
C C
C 3 IPOST=2
C 10 CONTINUE
C GO TO (4,4,4,5,4,5,5,5,5,5,5,5,955,955),ICLASS
C 4 IF(RESERVE.EQ.0)300,5
C C DOES ITEM EXIST FOR DATE OF GAME
C C
C 5 IF(DATE.GE.DATEIN.AND.DATE.LT.DATEOUT) 6,300
C C EXCLUDE THOSE ITEMS WITH IMPROPER TASK
C C
C 6 CONTINUE
C DECODE (8,70000,TASK) KTASK
C 70000 FORMAT (I1)
C IF (KTASK.LE. NTASK(IPOST))7,300
C 7 CONTINUE
C IF (KTASK.GE. 1RA)8,900
C C DETERMINE LOCAL SURROUTINE TO EVALUATE ITEM
C C
C 8 CONTINUE

```

```

GO TO (20,325,325,9,30,9,9,9,9,9,9,9,40,955,955),ICLASS
325 CONTINUE
C ASSIGN THE APPROPRIATE VALUES TO NOPERSON,NOALERT,NOINCOM
C
CHANGE NOPERSON
NC= 23
CALL CHANGE
CHANGE NOALERT
NC= 25
CALL CHANGE
CHANGE NOINCOM
NC= 26
CALL CHANGE
GO TO (326,327,327),PLANTEST(IPOST)
326 NOPERSON=NOPERSQ1
GO TO 328
327 NOPERSON=NOPERSQ2
GO TO 328
3271 NOPERSON=NOPERSQ3
328 IF (SIDE.EQ.3HRED) 329,330
329 JJJ=ITL(TYPE,NNTYPES(26),NRTYPES(2))
GO TO 331
330 JJJ=ITL(TYPE,NNTYPES,NRTYPES(1))
331 IF (JJJ)332,333
332 NOALERT=NOPERSON*ALERTNO(JJJ)+.5
NOINCOM=NOPERSON*COMINNO(JJJ)+.5
GO TO 20
333 NOALERT=NOINCOM=NOPERSON
334 IF (PLANTEST(IPOST).EQ.3) 3334,20
334 NOALERT=NOALERT=NUMOHL
C
C LOCAL SUBROUTINE TO SET PROPER DBL FOR PLAN
C
20 CONTINUE
CHANGE ALRTDBL
NC= 90
CALL CHANGE
CHANGE NALRTDBL
NC= 91
CALL CHANGE
GO TO (21,21,22),PLANTEST(IPOST)
21 ALRTDBL=ADBLT
NALRTDBL=NADBLT
GO TO 4
22 ALRTDBL=ADBLR
NALRTDBL=NADBLR
GO TO 9
30 CONTINUE
C
C ASSIGN THE APPROPRIATE VALUES FOR VAL,TYPE,EFFECTNES
C
CHANGE VAL
NC= 43
CALL CHANGE
CHANGE TYPE

```

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97000
98000

99000

100000
101000
102000
103000
104000
105000
106000
107000
108000
109000
110000
111000

112000

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NC= 2
CALL CHANGE
EFFECTNES
113000
NC= 113
CALL CHANGE
GO TO (31,32,32,32), NPOSTURE(IPOST)
114000
EFFECTNES=EFFECTNES1
115000
VAL=VAL1
116000
TYPE=TYPE1
117000
GO TO 33
118000
EFFECTNES=EFFECTNES2
119000
VAL=VAL2
120000
TYPE=TYPE2
121000
33 GO TO 9
122000
C IGIM IS INDUSTRIAL VALUE FOR SIDE BLUE
123000
C
124000
40 CONTINUE
125000
IF(TYPE.EQ.6*POINT.OR.TYPE.EQ.6*COMDES) 9,1784
126000
1784 CONTINUE
127000
4000 NTGOS=NOIGIMS(I,IPOST)
128000
DO 41 I=1,NTGOS
129000
IF(CNTRYLOC.EQ.JCOUNTRY(I,IPOST)) 42,41
130000
41 CONTINUE
131000
GO TO 431
132000
42 IF(IGIM.LT.MINIGIM(I,IPOST)) 300,431
133000
431 IF(JGIM.EQ.4*IGIM) 43,4373
134000
4373 XIND=NUMGET(PIGIM,8)
135000
GO TO 431
136000
43 XIND=IGIM
137000
C
138000
C CALCULATE VALUE FOR U/I TARGETS
139000
C
140000
431 CONTINUE
141000
CHANGE VAL
142000
NC= 43
143000
CALL CHANGE
144000
VAL=ZPOP(IPOST)*XIND*XPOP(IPOST)*POP
145000
IF(VAL.LE.0.) 300,9
146000
C
147000
C OMIT THE ITEM IF RESERVE=0
148000
C
149000
9 IF(RESERVE.EQ.0) 300,9889
150000
9889 MYSIDE=SIDE
151000
C
152000
C IF TARDEFS ARE TO BE CONSIDERED, DO THE NECESSARY PROCESSING
153000
C
154000
IF(NTARMI(IPOST)) 950,951
155000
950 CALL TARDEFS(NTARMI,NTARLO,LAT,LONG,SIDE)
156000
IF(NTARMI.GT.0) 3751,3752
157000
3751 CONTINUE
158000
CHANGE TARDEFI
159000
NC= 47
160000
CALL CHANGE
TARDEFI=NTARMI
3752 IF(NTARLO.GT.0) 3753,951

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3733 CONTINUE
CHANGE TARDEFLO
      NC= 48
      CALL CHANGE
      TARDEFLO=TARFLO
C
C IS ITEM DEFCONTR OR INTCTPR
C
951 IF(ICLASS.EQ.4.OR.ICLASS.EQ.5) 952,955
C
C IF ZONES ARE TO BE PROCESSED, DO SO
C
952 IF(NZONEIT(IPOST)) 953,955
953 NZONE=MYZONE(LAT, LONG)
954 CONTINUE
CHANGE ZONE
      NC= 28
      CALL CHANGE
      ZONE=NZONE
C
C IF ITEM IS TO BE KEPT, RECORD IT
C
955 CALL COUNTDES(IPOST,DESIG,IREGION)
      CALL ADDVAL(IPOST,ICLASS,TYPE,VAL,CLASS)
CHANGE IREG
      NC= 51
      CALL CHANGE
      IREG=IREGION
CHANGE FLAG
      NC= 180
      CALL CHANGE
C
C SET FLAG ACCORDING TO FOLLOWING CRITERIA FOR RISOP-72 INDIA/SIERRA
C
      IF(SIDE.EQ.4)HLUE)R001,995
8001 IF(ICLASS.GT.15)GO TO 8550
      GO TO 18000,8100,8200,8100,8300,8400,8100,8550,8550,8300,
      1 8550,8550,8550,8500), ICLASS
8000 FLAG=1
      GO TO 995
8100 FLAG=2
      GO TO 995
8200 FLAG=3
      GO TO 995
8300 FLAG=4
      GO TO 995
8400 FLAG=5
      GO TO 995
8500 FLAG=6
      GO TO 995
8550 IF(ITYPE.EQ.8)HRQ/NI/HA)8600,8650
8600 FLAG=7
      GO TO 995
C DEFAULT VALUE FOR FLAG IS R
8650 FLAG=8

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161000
162000163000
164000
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174000
175000176000
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178000
179000
180000
181000
182000183000
184000185000
186000
187000
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208000

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995 CONTINUE
C CALL PRINTIT
C PUT ITEM ON OUTPUT TAPE
C
9997 CALL OUTITEM
GO TO 3300
C
C IF ITEM IS TO BE OMITTED, RECORD IT
C
300 CALL NUMDEL(IPOST,DESIG,IREF)
3300 CONTINUE
NORECORD=NORECORD+1
C
C BRING IN THE NEXT ITEM
C
C CALL NEXTITEM
GO TO (50,688),ISWTERM
C
C THE FOLLOWING ARE ERROR MESSAGES
C
900 PRINT 1000
1000 FORMAT(10X,31HERROR IN TASK IN FOLLOWING ITEM)
ERROR=1
CALL PRITEM
GO TO 300
902 PRINT 1002
1002 FORMAT(10X,25HERROR IN DATA CARD (DATE))
GO TO 60
903 PRINT 1003
1003 FORMAT(10X,25HERROR IN DATA CARD (SIDE))
GO TO 60
904 PRINT 1004
1004 FORMAT(10X,28HERROR IN DATA CARD (PCT-POP))
GO TO 60
9051 PRINT 4793
4793 FORMAT(10X,19HPLAN NAME INCORRECT )
GO TO 60
C
C OUTPUT SUMMARIES
C
C
C PRINT THE TOTAL NUMBER OF RECORDS PROCESSED
C
688 PRINT 861,NCRECORD
861 FORMAT(10X,10X,26HTOTAL RECORDS PROCESSED = ,I8)
C
C DO FOR BOTH SIDES
C
DO 7555 J=1,2
CALL PAGESKP
C
C PRINT THE SUMMARY BY REGION AND TYPE OF TARGETS KEPT
C
PRINT 8620, IWSIDE(J)
8620 FORMAT(10X,27HTARGET COUNT BY REGION FOR ,A5,7HTARGETS /)

```

```

PRINT 8623
8623 FORMAT(10X,'42HDESIG IREG1 IREG2 IREG3 TOTAL /)
ITOTRG1=ITOTRG2+ITOTRG3
IDOWNS=KK*IN(J)
IUPS=IDOWNS*NODESIG(J)-1
DO 8621 I=IDOWNS,IUPS
ITOTRG1=ITOTRG1+DESIGNO(I,1)
ITOTRG2=ITOTRG2+DESIGNO(I,2)
ITOTRG3=ITOTRG3+DESIGNO(I,3)
JTOTAL=DESIGNO(I,1)+DESIGNO(I,2)+DESIGNO(I,3)
8621 PRINT 8622,DESIG(I),DESIGNO(I,1),DESIGNO(I,2),DESIGNO(I,3),
      *JTOTAL
8622 FORMAT(10X,A2,5X,4(15,5X))
PRINT 8625
8625 FORMAT(1H6,17X,35H-----)
JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3
PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL
8626 FORMAT(17X,4(15,5X))//
7555 CONTINUE
C
C DO FOR BOTH SIDES
C
DO 1135 J=1,2
CALL PAGESKP
C PRINT THE SUMMARY BY REGION AND TYPE OF TARGETS OMITTED
C
PRINT 1130,I=SIDE(J)
1130 FORMAT(10X,30HTARGETS DELETED BY REGION FOR ,A5,7HTARGETS /)
PRINT 8623
ITOTRG1=ITOTRG2+ITOTRG3=0
IDOWNS=LL*IN(J)
IUPS=IDOWNS*LODESIG(J)-1
DO 1132 I=IDOWNS,IUPS
ITOTRG1=ITOTRG1+LDESIGNO(I,1)
ITOTRG2=ITOTRG2+LDESIGNO(I,2)
ITOTRG3=ITOTRG3+LDESIGNO(I,3)
JTOTAL=LDESIGNO(I,1)+LDESIGNO(I,2)+LDESIGNO(I,3)
1132 PRINT 8622,LDESIG(I),LDESIGNO(I,1),LDESIGNO(I,2),
      *LDESIGNO(I,3),JTOTAL
PRINT 8625
JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3
PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL
1135 CONTINUE
C
C PRINT SUMMARY OF CUMULATIVE VALUE FOR CLASS AND TYPE
C
CALL PRINTVAL (X,X,X,X,X)
60 RETURN
END

```


SATS DBMOD

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PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

IDENT DBMOD

DBMOD	02454
PROCESS	00450
EDITERM	01173
EDITAPE	00001
ITP	00015
MCPRINT	00001
MYIDENT	00001
CUTIGIM	00146
IDESIGS	03720
NODESIGS	00004
NRYPES	00460
MYSIDE	00001
PRINTS	00003
LODESIGS	03720
LODESIGS	00004

EXTERNAL SYMBOLS

THEND.
Q1Q10100
ORQDICT.
NUMGET
ROTPES
PAGFSKP
INITAPE
STRIN
INITEDIT
IMPITEM
CHANGE
ITLF
TARDEFS
MYZONE
COUNTDES
ADVAL
PRINTIT
OUTITEM
NUMDEL
NEXTITEM
PRITEM
PRNTVAL
TSM.
DEC.
STM.
QNSINGL.

P01772	GG00021.	01764
P02001	GG00022.	01773
P02010	GG00023.	02002
P02021	GG00024.	02011
P02036	GG00025.	02026
P02044	GG00026.	02036
P02110	GG00027.	02072
P02122	GG00030.	02114
P02137	GG00031.	02125
P02156	GG00032.	02146
P02164	GG00033.	02156
P02230	GG00034.	02212
P02242	GG00035.	02234
P02257	GG00036.	02245
C00163	M1	
C00164	H2	
C00324	HILDATTR	
P02377	I	00517 01476
C00344	IALERT	00521 02053
C00354	IALT	00534 02057
C00224	IARDEF	
C00494	IATTACK	
C00227	ICLASS	01212 01654
C00373	ICLASSY	00521 02057
C00235	ICOMPLEX	
C00422	ICORR	
C00424	IDBL	
C00000	IDESIGS	00565 02050
C02400	IDOWNS	02077 02170
C00362	IDNO	02053 02170
P02401	IFERROR	01751
P01164	IF00001.	
P01171	IF00002.	
P01252	IF00003.	01251
P01461	IF00004.	
P01605	IF00005.	
C00000	IFREQ	00464 01503
C00216	IGIW	00511 01522
P02402	IGOFO.	00511 01522
C00274	IGROUP	01274 01323
P02403	II	01274 01323
C00423	IMIRV	01112 01131
P02272	IN00002.	01112 01131
P02273	IN00005.	02277 02313
P02274	IN00006.	02277 02313
P02275	IN00013.	02276 02310
C00174	INDEXNO	02276 02311
C00346	INDOV	
X00007	INITAPE	00415 01160
X00011	INITENT	01205
C00003	INITENH	
P02362	INITIAL.	00453

01346 01754

01543

01542

01547

01267

01254

01254

01251

01246

P01725 .300

P01445 .31

P01451 .32

P01310 .325

P01326 .326

P01330 .327

P01332 .3271

P01334 .328

P01337 .329

P01345 .330

P01455 .33

P01732 .3300

P01352 .331

P01354 .332

P01376 .333

P01403 .3334

P01564 .3751

P01572 .3752

P01575 .3753

P00614 .400

P01244 .4

P01456 .40

P01464 .4000

P00641 .401

P00643 .402

P00647 .403

P00666 .404

P00671 .4041

P00673 .4042

P00676 .4043

P00700 .4044

P00702 .406

P01476 .41

P01503 .42

P01522 .43

P01527 .431

P01510 .4311

P01513 .4373

P00564 .475

P00575 .476

P01212 .50

P01247 .5

P00721 .503

P00727 .5031

P00731 .5032

P00733 .5033

P00735 .5034

P00742 .5035

P00770 .5037

P00774 .5038

P01154 .504

P00531 .600

P01255 .6

P02267 .60

01444

01444

01450

P01724 .3300

P01344 .331

P01353 .332

P01353 .333

P01562 .3751

P01231

P01306

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P00642

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P00672

P00670

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P01475

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P00741

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P00071	..100013	00672							
P00072	..100014	00677							
P00106	..100015	00720							
P00107	..100016	00725							
P00110	..100017	00732							
P00242	..100018	01123							
P00254	..100019	01203							
P00255	..100020	01216							
P00261	..100021	01335							
P00262	..100022	01457							
P00263	..100023	01462							
P00264	..100024	01511							
P00265	..100025	01653							
P00266	..100026	01712							
P00137	..10010	01022							
P00146	..10020	01033							
P00277	..1002	01760							
P00174	..10030	01047							
P00307	..1003	01767							
P00317	..1004	01776							
P00222	..11010	01072							
P00434	..1130	02151							
P00231	..13010	01111							
P00243	..18010	01141							
P00327	..4793	02005							
P00042	..500	00603							
P00050	..501	00621							
P00073	..502	00705							
P00111	..5036	00753							
P00065	..60000	00657							
P00256	..70000	01260							
P00026	..801	00472							
P00336	..861	02014							
P00351	..8620	02031							
P00400	..8622	02075							
P00365	..8623	02041							
P00411	..8625	02117							
P00424	..8626	02130							
P02413	J	00537	02022	02032	02137	02142	02152	02257	02322
C00000	JCOUNTRY	00543	00756	00756	00756	01074	01074	01474	01474
P02414	JFREQ	00476	00510	01013					
P02415	JGJW	00477	01014	01510					
P02416	JJJ	01343	01351	01352	01360				
C00014	JOUT	01201							
P02417	JSLOT	00634	00645	00661	00722	00730	00734	00743	02343
P02420	JTOTAL	02071	02104	02124	02134	02211	02224	02244	02254
C00237	JTYPE								
C00375	JTYPE								
P02421	KK	01134	01142	01151					
C00002	KKMIN	02046	02047						
C00322	KORSTYLE								
P02422	KTASK	01262	01265	01270					

SATS	DBMOD	12/21/71	ED	0	PAGE NO.	28
C00204	LAT	01557	01614			
C00764	LODESIGNO	00560	00560			
		02207	02207			
		00563	00563			
C00000	LODESIGS					
C00206	LEGNO					
C01153	LGLOB					
C00201	LINK					
C00002	LLMIN	02166	02167			
C00000	LODESIGS	02170	02171			
C00205	LONG	01557	01614			
P02423	LPLAN	00627	00664			
P02424	LPOSTURE	00626	00652			
P02425	LSIDE	00625	00641			
P02426	LTASK	00630	00657			
C00167	MAJGR					
C00256	MAXFACTV					
C00255	MAXFRACV					
C00354	MAXKILL					
C00357	MCODE					
C00062	MINIGIW	00544	00545			
C00253	MINKILL					
C00170	MINOR					
C00223	MISDEF					
P02427	MLOW	01125	01127			
P02430	MH	01064	01102			
C00002	MTYPES	01113	01113			
P02431	MUP	01133	01152			
C00217	MVA					
C00407	MWIDS					
C00000	MYIDENT	00463	00463			
C00000	MYSIDE	01550	01550			
X00016	MYZONE	01612				
C00332	NADBLI	01421				
C00333	NADBLR	01424				
C00415	NAINT					
C00405	NAL					
C00301	NALRTD8L	01422	01425			
C00303	NALRTDLY					
C00150	NAME					
C00335	NAREDEC					
C00262	NASMS					
C00002	NC					
C00263	NCH	01310	01311			
P02432	NCNLOC	01527	01530			
P02433	NDATE	00760	00765			
C00242	NDECOYS	00605	00612			
C00411	NDET					
X00024	NEXTITEM	01734				
C00211	NEXTZONE					
C00000	NI					
P02434	NIGIW	00740	00742			
C00176	NMPSTE					
P02435	NNIGIW	00714	00737			

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ED 0

Code	NTYPE	00576	00576	01143	01143	01341	01347	01376	01376
C00004	NTYPES	00576	00576	01143	01143	01341	01347		
C00177	NOALERT	01364	01364	01377	01403	01403	01404		
C00260	NOBOMB								
C00261	NOBOMB2								
C00000	NODESIGNS	02050	02051	00743	00744	01465	01465		
C00144	NOIGMS	00525	00526	01374					
C00200	NOINCOM	01326	01326	01326					
C00433	NOINCOM	01326	01326	01326					
C00434	NOINCOM	01326	01326	01326					
C00435	NOINCOM	01326	01326	01326					
C00175	NOINCOM	01327	01331	01333	01354	01354	01365	01376	01376
C00000	NOINCOM	01327	01331	01333	01354	01354	01365	01376	01376
C00236	NOINCOM	00460	00461	01732	02015				
C00001	NOINCOM	00457	01732	01733	02015				
C00410	NOINCOM	00707	00717	01050					
C00437	NOINCOM	00523	00653	01441					
C00005	NOINCOM	00474	00502	01011					
C00240	NOINCOM	00530	00530	01117	01117	01131	01132	01342	01350
C00000	NOINCOM	00623	00637	01034					
C00241	NOINCOM	01556	01561	01570					
C00356	NOINCOM	00524	00730	01162	01164	01552			
C00242	NOINCOM	01556	01572	01601					
C00021	NOINCOM	00712	00725	01053					
C00243	NOINCOM	00523	00661	01266					
C00244	NOINCOM	01466	01500						
C00007	NOINCOM	01404							
C00337	NOINCOM	00647	00735	00763	00763	01513			
C00245	NOINCOM								
C00436	NOINCOM								
C00023	NOINCOM								
C00004	NOINCOM								
C00001	NOINCOM								
C00336	NOINCOM								
C00355	NOINCOM								
C00345	NOINCOM								
C00246	NOINCOM	01615	01616	01624					
C00017	NOINCOM	00525	00734	01167	01171	01610			
C00247	NOINCOM	00713	00731	01054					
C00022	NOINCOM	01722							
C00276	NOINCOM	02302							
C00315	NOINCOM	02317							
C00327	NOINCOM	02331							
C00006	NOINCOM	01156	02024	02144					
C00412	NOINCOM								
C00264	NOINCOM								
C00315	NOINCOM								
C00266	NOINCOM								
C00277	NOINCOM								
C00316	NOINCOM								
C00450	NOINCOM	01515							
C00314	NOINCOM								
C00317	NOINCOM								
C00425	NOINCOM								
C00311	NOINCOM								

X00027 TSM.	00470	00601	00617	00703	00751				
C00305 TTOS									
C00307 TVUL									
C00150 TYPE	01341	01347	01450	01454	01456	01461	01461	01636	01711
C00443 TYPE1	01447								
C00444 TYPE2	01453								
C00376 TYPE2									
P02304 UP00000.	00520	00535	00550	00553	00571	00746	00771	01470	02111
P02321 UP00001.	02174	02231	02300	02305	02306	02307	02313	02314	02326
P02333 UP00003.	00540	02023	02140	02143	02260	02315	02322	02323	
P02342 UP00006.	01065	01103	02327	02334	02335	02336	02360	02340	
P02353 UP00007.	00635	00646	02343	02344	02345	02351	02351		
C00221 VAL	01222	01226	01637	01640	01731	02354	02355	02356	02361
C00441 VAL1	01447	01453	01540	01540	01541	01636			
C00442 VAL2	01446								
C00222 VALU	01452								
C00147 VALUE									
C00162 VULN									
C00165 WACNO									
C00240 WMDTYPE									
C00371 WMDTYEN									
P00522 WS00001.	00533								
P00536 WS00002.	00551								
P00542 WS00003.	00546								
P00555 WS00004.	00566								
P00573 WS00005.	00577								
P00616 WS00006.	01155								
P00750 WS00007.	00773	00773							
P01067 WS00010.	01105	01105							
P01136 WS00011.	01153	01153							
P01472 WS00012.	01501	01501							
P02024 WS00013.	02141	02141							
P02056 WS00014.	02113	02113							
P02144 WS00015.	02261	02233							
P02176 WS00016.	02233	02233							
P02451 X	02264	02264	02265	02266					
P02452 XINO	01521	01526	01534						
P00011 XPOP	00532	00722	01535						
P02453 XPROP	00711	00721	00723	01052					
C00257 YIELD									
C00202 ZONE	01625	01625							
P00015 ZPOP	00532	00724	01534						

01047 SY#80LS

[illegible]

5.4TS INDEXTYP

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES
KLAT
JSIDE
EXTERNAL SYMBOLS
00001CT.

00067
00003
11116
00001

IDENT

INDEXTYP

12/21/71

ED

0

PAGE NO.

2

1010

C10460 ATEST									
P00031 BEGIN.	00045	00054	00060						
P00001 DICT.	00005	00034	00035						
P00046 ENDING.	00006	00027	00031						
P00000 EXIT.	00052								
C11074 FACLOW									
P00016 FP00001.	00043	00044							
P00063 GETPL.	00036								
P00053 GETPU.	00041	00057							
C11104 IHIGH	00012	00012							
C11102 ILOW	00010	00010							
P00003 INDEXTYP	00003								
P00031 INITIAL.	00006								
P00003 ISIDE									
C11106 ITARTAPE									
P00014 .3	00021	00022							
P00023 .4	00021	00017	00023	00026					
P00026 .5	00015								
P00064 J									
C11112 JAREAS	00013	00024							
P00065 JHIGH									
C07640 JINDEX									
C11110 JLOW									
C11114 JLOCS									
P00066 JLOW	00011	00014							
C00000 JSIDE	00007	00007							
C11076 LAREAS									
C10150 LINDEX									
C11100 LNLOW									
C11070 MAXHI									
C11072 MAXLOW									
C10770 NBAREAS									
C05670 NBATTS									
C10771 NBAREAS									
C10772 NTARSHI									
C11016 NTARSL0									
C11042 NTARTEST	00020	00020							
P00003 NOMBATTS	00016								
P00045 PF00002.	00042								
X00031 Q80DICT.	00000	00004							
C03720 RADIUS									
P00024 TS00001.	00015								
P00030 VALUE.	00027	00031							
P00016 W00001.	00025	00025							
C00000 XLAT									
C01750 XLONG									
C11066 XTEST									
00057 SYMBOLS									

SUBROUTINE INDMOD
CSUBR INDMOD 20JUL71 1000
COECLAREX 25000
2008

COMMON/PROCESS/NI,NV,IC,INTEN(100),VALUE(500),DEF(500),LGLOB(500)
TYPE INTEGER VALUE
TYPE LOGICAL DEF,LGLOB
COMMON/EDITERM/ISITERM
COMMON/EDITAPE/INTP,ROUT,ITOUT(10),JOUT
EQUIVALENCE(CLASS,VALUE(1))
TYPE INTEGER CLASS
EQUIVALENCE(TYPE,VALUE(2))
TYPE INTEGER TYPE
EQUIVALENCE(SIDE,VALUE(3))
TYPE INTEGER SIDE
EQUIVALENCE(CNTRYOWN,VALUE(4))
TYPE INTEGER CNTRYOWN
EQUIVALENCE(CNTRYLOC,VALUE(5))
TYPE INTEGER CNTRYLOC
EQUIVALENCE(FUNCTION,VALUE(6))
TYPE INTEGER FUNCTION
EQUIVALENCE(SITENO,VALUE(7))
TYPE INTEGER SITENO
EQUIVALENCE(NAME,VALUE(8))
TYPE INTEGER NAME
EQUIVALENCE(SONNO,VALUE(9))
TYPE INTEGER SONNO
EQUIVALENCE(FLTNO,VALUE(10))
TYPE INTEGER FLTNO
EQUIVALENCE(RENO,VALUE(11))
TYPE INTEGER RENO
EQUIVALENCE(VULN,VALUE(12))
TYPE INTEGER VULN
EQUIVALENCE(H1,VALUE(13))
TYPE INTEGER H1
EQUIVALENCE(H2,VALUE(14))
TYPE INTEGER H2
EQUIVALENCE(WACNO,VALUE(15))
TYPE INTEGER WACNO
EQUIVALENCE(CATCODE,VALUE(16))
TYPE INTEGER CATCODE
EQUIVALENCE(MAJOR,VALUE(17))
TYPE INTEGER MAJOR
EQUIVALENCE(MINOR,VALUE(18))
TYPE INTEGER MINOR
EQUIVALENCE(DESIG,VALUE(19))
TYPE INTEGER DESIG
EQUIVALENCE(TASK,VALUE(20))
TYPE INTEGER TASK
EQUIVALENCE(POSTURE,VALUE(21))
TYPE INTEGER POSTURE
EQUIVALENCE(INDEXNO,VALUE(22))
TYPE INTEGER INDEXNO
EQUIVALENCE(INPERSON,VALUE(23))
TYPE INTEGER INPERSON
EQUIVALENCE(INMPSITE,VALUE(24))
TYPE INTEGER INMPSITE

EQUIVALENCE(NOALERT,VALUE(25))
 TYPE INTEGER NOALERT
 EQUIVALENCE(NOINCOM,VALUE(26))
 TYPE INTEGER NOINCOM
 EQUIVALENCE(LINK,VALUE(27))
 TYPE INTEGER LINK
 EQUIVALENCE(ZONE,VALUE(28))
 TYPE INTEGER ZONE
 EQUIVALENCE(AREA,VALUE(29))
 TYPE REAL AREA
 EQUIVALENCE(LAT,VALUE(30))
 TYPE REAL LAT
 EQUIVALENCE(LONG,VALUE(31))
 TYPE REAL LONG
 EQUIVALENCE(LFGNO,VALUE(32))
 TYPE INTEGER LFGNO
 EQUIVALENCE(RESERVE,VALUE(33))
 TYPE INTEGER RESERVE
 EQUIVALENCE(LEGNO,VALUE(34))
 TYPE INTEGER LEGNO
 EQUIVALENCE(INFATZONE,VALUE(35))
 TYPE INTEGER INFATZONE
 EQUIVALENCE(POINT,VALUE(36))
 TYPE INTEGER POINT
 EQUIVALENCE(POINT,VALUE(37))
 TYPE INTEGER POINT
 EQUIVALENCE(DATEIN,VALUE(38))
 TYPE REAL DATEIN
 EQUIVALENCE(POP,VALUE(39))
 TYPE REAL POP
 EQUIVALENCE(SIGW,VALUE(40))
 TYPE INTEGER SIGW
 EQUIVALENCE(MVA,VALUE(41))
 TYPE INTEGER MVA
 EQUIVALENCE(RADIUS,VALUE(42))
 TYPE REAL RADIUS
 EQUIVALENCE(VAL,VALUE(43))
 TYPE REAL VAL
 EQUIVALENCE(VALU,VALUE(44))
 TYPE REAL VALU
 EQUIVALENCE(MISDEF,VALUE(45))
 TYPE INTEGER MISDEF
 EQUIVALENCE(TARDEF,VALUE(46))
 TYPE INTEGER TARDEF
 EQUIVALENCE(TARDEFMT,VALUE(47))
 TYPE INTEGER TARDEFMT
 EQUIVALENCE(TARDEFLO,VALUE(48))
 TYPE INTEGER TARDEFLO
 EQUIVALENCE(ICLASS,VALUE(49))
 TYPE INTEGER ICLASS
 EQUIVALENCE(IITYPE,VALUE(50))
 TYPE INTEGER IITYPE
 EQUIVALENCE(IPEG,VALUE(51))
 TYPE INTEGER IPEG
 EQUIVALENCE(REFUEL,VALUE(52))
 TYPE INTEGER REFUEL

```

EQUIVALENCE(IOTRER ,VALUE( 53))
TYPE INTEGER TOTRER
EQUIVALENCE(IGROUP ,VALUE( 54))
TYPE INTEGER IGROUP
EQUIVALENCE(ICOMPLEX,VALUE( 55))
TYPE INTEGER ICOMPLEX
EQUIVALENCE(ITGT ,VALUE( 56))
TYPE INTEGER ITGT
EQUIVALENCE(JTYPE ,VALUE( 57))
TYPE INTEGER JTYPE
EQUIVALENCE(MDTYPE ,VALUE( 58))
TYPE INTEGER MDTYPE
EQUIVALENCE(ASMTYPE ,VALUE( 59))
TYPE INTEGER ASMTYPE
EQUIVALENCE(NDCCOYS ,VALUE( 60))
TYPE INTEGER NDCCOYS
EQUIVALENCE(FRAC ,VALUE( 61))
TYPE REAL FRAC
EQUIVALENCE(DELTA ,VALUE( 62))
TYPE REAL DELTA
EQUIVALENCE(FVALM1 ,VALUE( 63))
TYPE REAL FVALM1
EQUIVALENCE(T1 ,VALUE( 64))
TYPE REAL T1
EQUIVALENCE(T2 ,VALUE( 65))
TYPE REAL T2
EQUIVALENCE(T3 ,VALUE( 66))
TYPE REAL T3
EQUIVALENCE(FVALT1 ,VALUE( 67))
TYPE REAL FVALT1
EQUIVALENCE(FVALT2 ,VALUE( 68))
TYPE REAL FVALT2
EQUIVALENCE(MINKILL ,VALUE( 69))
TYPE REAL MINKILL
EQUIVALENCE(MAXKILL ,VALUE( 70))
TYPE REAL MAXKILL
EQUIVALENCE(MAXFRACV,VALUE( 71))
TYPE REAL MAXFRACV
EQUIVALENCE(MAXFACTV,VALUE( 72))
TYPE REAL MAXFACTV
EQUIVALENCE(YIELD ,VALUE( 73))
TYPE REAL YIELD
EQUIVALENCE(NOBOMB1 ,VALUE( 74))
TYPE INTEGER NOBOMB1
EQUIVALENCE(NOBOMB2 ,VALUE( 75))
TYPE INTEGER NOBOMB2
EQUIVALENCE(NASMS ,VALUE( 76))
TYPE INTEGER NASMS
EQUIVALENCE(NCK ,VALUE( 77))
TYPE INTEGER NCK
EQUIVALENCE(PAYLOAD ,VALUE( 78))
TYPE INTEGER PAYLOAD
EQUIVALENCE(IREP ,VALUE( 79))
TYPE INTEGER IREP
EQUIVALENCE(PDUD ,VALUE( 80))
TYPE REAL PDUD

```

EQUIVALENCE(CEP ,VALUE(81))
 TYPE REAL CEP
 EQUIVALENCE(RANGE ,VALUE(82))
 TYPE REAL RANGE
 EQUIVALENCE(RANGEDEC,VALUE(83))
 TYPE REAL RANGEDEC
 EQUIVALENCE(RANGEREFC,VALUE(84))
 TYPE REAL RANGEREFC
 EQUIVALENCE(SPEED,VALUE(85))
 TYPE REAL SPEED
 EQUIVALENCE(SPOLO,VALUE(86))
 TYPE REAL SPOLO
 EQUIVALENCE(SPOASH,VALUE(87))
 TYPE REAL SPOASH
 EQUIVALENCE(SREL,VALUE(88))
 TYPE REAL SREL
 EQUIVALENCE(PEN,VALUE(89))
 TYPE REAL PEN
 EQUIVALENCE(ALERTDBL,VALUE(90))
 TYPE REAL ALERTDBL
 EQUIVALENCE(NALRTDBL,VALUE(91))
 TYPE REAL NALRTDBL
 EQUIVALENCE(ALERTDLY,VALUE(92))
 TYPE REAL ALERTDLY
 EQUIVALENCE(NALRTDLY,VALUE(93))
 TYPE REAL NALRTDLY
 EQUIVALENCE(COREL,VALUE(94))
 TYPE REAL COREL
 EQUIVALENCE(TTOS,VALUE(95))
 TYPE REAL TTOS
 EQUIVALENCE(TMODEL,VALUE(96))
 TYPE REAL TMODEL
 EQUIVALENCE(TVUL,VALUE(97))
 TYPE REAL TVUL
 EQUIVALENCE(TRETARG,VALUE(98))
 TYPE REAL TRETARG
 EQUIVALENCE(PLABT,VALUE(99))
 TYPE REAL PLABT
 EQUIVALENCE(ARRATE,VALUE(100))
 TYPE REAL ARRATE
 EQUIVALENCE(PRABT,VALUE(101))
 TYPE REAL PRABT
 EQUIVALENCE(PINC,VALUE(102))
 TYPE REAL PINC
 EQUIVALENCE(POES,VALUE(103))
 TYPE REAL POES
 EQUIVALENCE(PFPF,VALUE(104))
 TYPE REAL PFPF
 EQUIVALENCE(PKMS,VALUE(105))
 TYPE REAL PKMS
 EQUIVALENCE(ATTRLEG,VALUE(106))
 TYPE REAL ATTRLEG
 EQUIVALENCE(ATTRCORR,VALUE(107))
 TYPE REAL ATTRCORR
 EQUIVALENCE(KORSTYLE,VALUE(108))
 TYPE INTEGER KORSTYLE

```

EQUIVALENCE (DEFRANGE,VALUE( 109))
TYPE REAL DEFRANGE
EQUIVALENCE (HILOATTR,VALUE( 110))
TYPE REAL HILOATTR
EQUIVALENCE (ATTRSUPP,VALUE( 111))
TYPE REAL ATTRSUPP
EQUIVALENCE (INTYP2 ,VALUE( 112))
TYPE INTEGER INTYP2
EQUIVALENCE (EFFECTNES,VALUE( 113))
TYPE REAL EFFECTNES
EQUIVALENCE (ISITE ,VALUE( 114))
TYPE INTEGER ISITE
EQUIVALENCE (IVULN ,VALUE( 115))
TYPE INTEGER IVULN
EQUIVALENCE (NADBL1 ,VALUE( 116))
TYPE REAL NADBL1
EQUIVALENCE (NADBLR ,VALUE( 117))
TYPE REAL NADBLR
EQUIVALENCE (NADBLI ,VALUE( 118))
TYPE REAL NADBLI
EQUIVALENCE (NAREADec,VALUE( 119))
TYPE INTEGER NAREADec
EQUIVALENCE (NMHDS ,VALUE( 120))
TYPE INTEGER NMHDS
EQUIVALENCE (NTINT ,VALUE( 121))
TYPE INTEGER NTINT
EQUIVALENCE (NADBLR ,VALUE( 122))
TYPE REAL NADBLR
EQUIVALENCE (TIMEN ,VALUE( 123))
TYPE REAL TIMEN
EQUIVALENCE (TIME ,VALUE( 124))
TYPE REAL TIME
EQUIVALENCE (DELAY ,VALUE( 125))
TYPE REAL DELAY
EQUIVALENCE (IALERT ,VALUE( 126))
TYPE INTEGER IALERT
EQUIVALENCE (NWTYPE ,VALUE( 127))
TYPE INTEGER NWTYPE
EQUIVALENCE (INDV ,VALUE( 128))
TYPE INTEGER INDV
EQUIVALENCE (INTAR ,VALUE( 129))
TYPE INTEGER INTAR
EQUIVALENCE (EVENT ,VALUE( 130))
TYPE INTEGER EVENT
EQUIVALENCE (EVENTN ,VALUE( 131))
TYPE INTEGER EVENTN
EQUIVALENCE (PLACE ,VALUE( 132))
TYPE INTEGER PLACE
EQUIVALENCE (PLACEN ,VALUE( 133))
TYPE INTEGER PLACEN
EQUIVALENCE (IALT ,VALUE( 134))
TYPE INTEGER IALT
EQUIVALENCE (NMHNS ,VALUE( 135))
TYPE INTEGER NMHNS
EQUIVALENCE (NTARG ,VALUE( 136))
TYPE INTEGER NTARG

```

```

EQUIVALENCE(MCODE,VALUE(137))
TYPE INTEGER MCODE
EQUIVALENCE(CODE,VALUE(138))
TYPE INTEGER CODE
EQUIVALENCE(BCODE,VALUE(139))
TYPE INTEGER BCODE
EQUIVALENCE(IDUD,VALUE(140))
TYPE INTEGER IDUD
EQUIVALENCE(AGX,VALUE(141))
TYPE INTEGER AGX
EQUIVALENCE(AGY,VALUE(142))
TYPE INTEGER AGY
EQUIVALENCE(DGX,VALUE(143))
TYPE INTEGER DGX
EQUIVALENCE(DGY,VALUE(144))
TYPE INTEGER DGY
EQUIVALENCE(AMOB,VALUE(145))
TYPE INTEGER AMOB
EQUIVALENCE(DMOB,VALUE(146))
TYPE INTEGER DMOB
EQUIVALENCE(MDTYPE,VALUE(147))
TYPE INTEGER MDTYPE
EQUIVALENCE(PRIMETAR,VALUE(148))
TYPE INTEGER PRIMETAR
EQUIVALENCE(ICLASST,VALUE(149))
TYPE INTEGER ICLASST
EQUIVALENCE(ITYPE,VALUE(150))
TYPE INTEGER ITYPE
EQUIVALENCE(JTYPE,VALUE(151))
TYPE INTEGER JTYPE
EQUIVALENCE(TYPE,VALUE(152))
TYPE INTEGER TYPE
EQUIVALENCE(CLASST,VALUE(153))
TYPE INTEGER CLASST
EQUIVALENCE(CNTYOWNT,VALUE(154))
TYPE INTEGER CNTYOWNT
EQUIVALENCE(CNTYLOCT,VALUE(155))
TYPE INTEGER CNTYLOCT
EQUIVALENCE(IPENMODE,VALUE(156))
TYPE INTEGER IPENMODE
EQUIVALENCE(IREQMODE,VALUE(157))
TYPE INTEGER IREQMODE
EQUIVALENCE(IATTACK,VALUE(158))
TYPE INTEGER IATTACK
EQUIVALENCE(NAL,VALUE(159))
TYPE INTEGER NAL
EQUIVALENCE(TAIM,VALUE(160))
TYPE INTEGER TAIM
EQUIVALENCE(MHMDOS,VALUE(161))
TYPE INTEGER MHMDOS
EQUIVALENCE(NPEN,VALUE(162))
TYPE INTEGER NPEN
EQUIVALENCE(NDET,VALUE(163))
TYPE INTEGER NDET
EQUIVALENCE(PARRIVE,VALUE(164))
TYPE REAL PARRIVE

```

```

EQUIVALENCE(ADEFZON ,VALUE( 165))
TYPE INTEGER ADEFZON
EQUIVALENCE(ADEFCMP ,VALUE( 166))
TYPE INTEGER ADEFCMP
EQUIVALENCE(NAINT ,VALUE( 167))
TYPE INTEGER NAINT
EQUIVALENCE(AZON1 ,VALUE( 168))
TYPE INTEGER AZON1
EQUIVALENCE(AZON2 ,VALUE( 169))
TYPE INTEGER AZON2
EQUIVALENCE(AZON3 ,VALUE( 170))
TYPE INTEGER AZON3
EQUIVALENCE(CPACTY ,VALUE( 171))
TYPE INTEGER CPACTY
EQUIVALENCE(ICORR ,VALUE( 172))
TYPE INTEGER ICORR
EQUIVALENCE(IMIRV ,VALUE( 173))
TYPE INTEGER IMIRV
EQUIVALENCE(IDBL ,VALUE( 174))
TYPE INTEGER IDBL
EQUIVALENCE(PKNAV ,VALUE( 175))
TYPE REAL PKNAV
EQUIVALENCE(ITIME ,VALUE( 176))
TYPE INTEGER ITIME
EQUIVALENCE(PSASW ,VALUE( 177))
TYPE REAL PSASW
EQUIVALENCE(TPASH ,VALUE( 178))
TYPE REAL TPASH
EQUIVALENCE(TGTSTAT ,VALUE( 179))
TYPE INTEGER TGTSTAT
EQUIVALENCE(IFLAG ,VALUE( 180))
TYPE INTEGER FLAG
EQUIVALENCE(NOPERSQ1,VALUE( 181))
TYPE INTEGER NOPERSQ1
EQUIVALENCE(NOPERSQ2,VALUE( 182))
TYPE INTEGER NOPERSQ2
EQUIVALENCE(NOPERSQ3,VALUE( 183))
TYPE INTEGER NOPERSQ3
EQUIVALENCE(NUMDBL ,VALUE( 184))
TYPE INTEGER NUMDBL
EQUIVALENCE(EFECNES1,VALUE( 185))
TYPE REAL EFECNES1
EQUIVALENCE(EFECNES2,VALUE( 186))
TYPE REAL EFECNES2
EQUIVALENCE(VAL1 ,VALUE( 187))
TYPE REAL VAL1
EQUIVALENCE(VAL2 ,VALUE( 188))
TYPE REAL VAL2
EQUIVALENCE(TYPE1 ,VALUE( 189))
TYPE INTEGER TYPE1
EQUIVALENCE(TYPE2 ,VALUE( 190))
TYPE INTEGER TYPE2

```

3000
4000
5000
6000

C
C THIS SUBROUTINE CONTROLS THE INFORMATION PROCESSING WHEN PROGRAM
C BASEMOD IS RUN AFTER PROGRAM INDEXER. THE REQUIRED INPUT AND OUTPUT

```

C FILES ARE AS FOLLOWS
C INPUT TAPES
C   LTN 04 = INDEXDB TAPE
C
C OUTPUT TAPES
C   LTN 06 = INMOODR TAPE
C
C *****
CUSE      INTRAA  19OCT70 *****
COMMON/TYPENAME/INDBEG(250),TYPENAME(250),CUMNO(15),BTYPES(15),
1INDCLAS(15)
COMMON/JCARD/JCARD(4)
CEND      INTRAA *****
C
C COMMON/TYPENAME/INDBEG(NT),TYPENAME(NT),CUMNO(NT),BTYPES(NT),
1INDCLAS(NT)
C
C NT      NUMBER OF TYPES
C NC      NUMBER OF CLASSES
C INDBEG(NT)  SMALLEST INDEX NUMBER FOR EACH TYPE
C TYPENAMES(NT) TYPE NAMES IN ORDER OF INCREASING INDEX NUMBER
C CUMNO(NT)   CUMULATIVE NUMBER OF TYPES IN EACH CLASS
C BTYPES(NT) NUMBER OF BLUE SIDE TYPES IN EACH CLASS
C INDCLAS(NT) SMALLEST INDEX NUMBER IN EACH CLASS
C
C *****
C COMMON/JCARD/JCARD(4)
C
C JCARD(1)  PRINT, IF PRINT OF ITEMS IN DATA BASE IS DESIRED,
C           BLANK, OTHERWISE
C JCARD(2)  FREQUENCY OF ABOVE PRINT
C JCARD(3)  SELECT, IF ITEMS IN COUNTRY LIST ARE TO BE KEPT,
C           DELETE, IF THEY ARE TO BE DELETED
C JCARD(4)  NUMBER OF COUNTRIES IN THE COUNTRY LIST
C *****
CUSE      INSIDE  14OCT70 *****
COMMON/INSIDE(2)
CEND      INSIDE *****
C
C USED IN SUBROUTINE PRICOUNT
C *****
CUSE      ITP      14OCT70 *****
COMMON/ITP/ITP
COMMON/NOPRINT/NOPRINT
COMMON/NOIDENT/NOIDENT
CEND      ITP *****
C
C USED IN SUBROUTINE SKIPFILE
C *****

```

```

C ITP          TAPE NUMBER
C *****
C
C CUSE         LDESIGS 140CT70 *****
C COMMON/LODESIGS/LODESIGS(500),LDESIGNO(500,3)
C COMMON/LODESIGS/LODESIGS(2),LLMIN(2)
C LDESIGS *****
C
C CUSED IN SUBROUTINE NUMDELM
C
C COMMON/LODESIGS/LODESIGS(NT),LDESIGNO(NT,NR)
C
C NT          TOTAL NUMBER OF TYPES FOR BOTH SIDES COMBINED
C NR          NUMBER OF REGIONS
C LDESIGS(NT) FIRST TWO LETTERS OF TARGET DESIGNATOR CODE
C LDESIGNO(NT,NR) ARRAY CONTAINING SUMMARIES BY REGION AND TYPE OF
C                ITEMS OMITTED
C
C COMMON/LODESIGS/LODESIGS(NS),LLMIN(NS)
C NS          NUMBER OF SIDES
C LDESIGS(NS) NUMBER OF DIFFERENT TYPES OF WEAPONS DELETED
C LLMIN(NS)  INTERNAL INDEX PARAMETER, =1 FOR BLUE, =251 FOR RED
C *****
C CUSE         IDESIGS 140CT70 *****
C COMMON/IDESIGS/IDESIGS(500),DESIGNO(500,3)
C COMMON/IDESIGS/NODESIGS(2),KKMIN(2)
C TYPE INTEGER DESIGNO
C IDESIGS *****
C
C CUSED IN SUBROUTINES CNTDES AND PRICOUNT
C
C COMMON/IDESIGS/IDESIGS(NT),DESIGNO(NT,NR)
C
C NT          TOTAL NUMBER OF TYPES FOR BOTH SIDES COMBINED
C NR          NUMBER OF REGIONS
C IDESIGS(NT) FIRST TWO LETTERS OF TARGET DESIGNATOR CODE
C DESIGNO(NT,NR) ARRAY CONTAINING SUMMARIES BY REGION AND TYPE OF
C                ITEMS KEPT
C
C COMMON/NODESIGS/NODESIGS(NS),KKMIN(NS)
C
C NS          NUMBER OF SIDES
C NODESIGS(NS) NUMBER OF DIFFERENT TYPES OF WEAPONS KEPT
C KKMIN(NS)  INTERNAL INDEX PARAMETER, =1 FOR BLUE, =251 FOR RED
C *****
C
C DIMENSION CNTRLST(25)
C TYPE INTEGER CNTRLST
C DATA (MYOUT(6)), (MYIN(4))
C *****
C

```



```

C
C
C      CALL STORAGE
C
C      C INITIALIZATION
C
      INSIDE(1)=44BLUE
      INSIDE(2)=34RED
      ITROURLE = 0
      IZ = 140
      DO 500 M = 1,200
      LDESIGS(M) = IDESIGS(M) = 8H
      DO 500 I = 1,3
      500 LDESIGNO(M,I) = DESIGNO(M,I) = 0
      NOPRINT = 1
      CALL PAGESKP
      JFREQ = NFREQ = 0
      MYIDENT = 8H BASEMOD
      CALL INITAPE
      NOUT=1
      ITOUT(1)=MYOUT
      JOUT=MYOUT
C
C      READ USER INPUT PARAMETERS
C
      READ 3500, (JCARD(JJ),JJ=1,4)
      3500 FORMAT (4(A8,2X))
      NCHTRY=NUMGET(JCARD(4),8)
      IF(NCHTRY .LE. 0)3501,3502
      3501 CONTINUE
      ICFLG=0
      GO TO 3504
      3502 CONTINUE
      ICFLG=1
      READ 3503,(CNTRLST(JJJ),JJJ=1,NCHTRY)
      3503 FORMAT(8(A2,8X)/)
      3504 CONTINUE
C
C      WRITE USER INPUT PARAMETERS
C
      PRINT 3505
      3505 FORMAT (1H1,28X,16HINPUT PARAMETERS////)
      PRINT 3506, (JCARD(JJ),JJ=1,4)
      3506 FORMAT (1X,4(A7,3X)/)
      IF (ICFLG .EQ. 0)3509,3507
      3507 CONTINUE
      PRINT 3508, (CNTRLST(JJ), JJ=1,NCHTRY)
      3508 FORMAT (1X,8(A2,8X))
      3509 CONTINUE
      PRINT 35081
      35081 FORMAT (1H1)
C
C      DETERMINE FREQUENCY OF PRINTS FOR DATA BASE ITEMS
C
      IF (JCARD(1)).EQ.54HPRINT) 3510,3520
      3510 CONTINUE

```

89000
 90000
 91000
 92000
 93000
 94000
 95000
 96000
 97000
 98000
 99000
 100000
 101000
 102000
 103000
 104000
 105000
 106000
 107000
 108000
 109000
 110000
 111000
 112000
 113000
 114000
 115000
 116000
 117000
 118000
 119000
 120000
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 122000
 123000
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 125000
 126000
 127000
 128000
 129000
 130000
 131000
 132000
 133000
 134000
 135000
 136000
 137000
 138000
 139000
 140000
 141000
 142000
 143000
 144000
 145000

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JFREQ = NUMGET(JCARD(2),8)
IF (JFREQ) 3520,3512
3512 CONTINUE
JFREQ = 1
3520 CONTINUE
MYIDENT = 7HINMODDS
CALL INITEDIT(MYIN)
C READ ITEM INTO MEMORY
C
C CALL IMPITEM
995 CONTINUE
C
C IS ITEM A TARGET
C
C IF (ICLASS .GE. 1 .AND. ICLASS .LE. 1519951,91
9951 CONTINUE
C SHOULD ITEM BE SELECTED OR DELETED ON THE BASIS OF CENTRYLOC
C
C IF (ICFLG .EQ. 0) 4965,4958
4958 CONTINUE
IF (SIDE .EQ. 4HBLUE) 49581,49582
49581 CONTINUE
II=1
GO TO 49583
49582 CONTINUE
II=2
49583 CONTINUE
IF (JCARD(3) .EQ. 6HDELETE) 4959,4962
C DELETE ITEM IF CENTRYLOC IS CONTAINED IN CNTRLST
C
4959 CONTINUE
DO 4961 LL=1,NCNTRY
IF (CENTRYLOC .EQ. CNTRLST(LL)) 4960,4961
4960 CONTINUE
CALL NUMDEL(II,DESIG,IREG)
GO TO 4005
4961 CONTINUE
GO TO 4965
C SELECT ITEM IF CENTRYLOC IS CONTAINED IN CNTRLST
C
4962 CONTINUE
DO 4964 LL=1,NCNTRY
IF (CENTRYLOC .EQ. CNTRLST(LL)) 4965,4964
4964 CONTINUE
CALL NUMDEL(II,DESIG,IREG)
GO TO 4005
4965 CONTINUE
CALL COUNTDES(II,DESIG,IREG)
IF (JFREQ) 3732,91
3732 CONTINUE
NFREQ = NFREQ + 1
IF (NFREQ.EQ.JFREQ) 3733,91

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146000
147000
148000
149000
150000
151000
152000
153000
154000
155000
156000
157000
157100
157200
157300
157400
157500
158000
159000
160000
161000
162000
162100
162200
162300
162400
162500
162600
162700
163000
164000
165000
166000
167000
168000
169000
170000
171000
172000
173000
174000
175000
176000
177000
178000
179000
180000
181000
182000
183000
184000
184500
185000
186000
187000
188000

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3733 CONTINUE
      NREQ = 0
92   CALL PRITEM
91   CONTINUE
4005 CALL OUTITEM
      CALL NEXTITEM
      GO TO (995,60),ISWTERM
60   CONTINUE
C
C TRANSFER BRKPNT FILE FROM MYIN TO MYOUT
C
      ITP=MYIN
      MYIDENT = 8HDIRINDEX
      CALL SETREAD
      CALL SKIPFILE(MYIN)
      BUFFER IN(MYIN,1) (INDREG,INDCLAS(15))
10   IF (UNIT,MYIN) 10,11,12,13
11   CONTINUE
      ITP=MYOUT
      CALL SETREAD
      CALL SKIPFILE(MYOUT)
      BUFFER OUT(MYOUT,1) (INDREG,INDCLAS(15))
15   IF (UNIT,MYOUT) 15,14,12,13
14   CONTINUE
      ENDFILE MYOUT
      REWIND MYIN
      GO TO 20
12   CONTINUE
      PRINT 21,ITP
21   FORMAT(11HNO EOF ON UNIT ,I3)
      GO TO 25
13   CONTINUE
      PRINT 22,ITP
22   FORMAT(22HCAPITY ERROR ON UNIT ,I3)
25   CONTINUE
      CALL ABORT
C
C PRINT OUTPUT SUMMARIES
C
20   CONTINUE
      CALL PRTCOUNT
      NO 1135 J=1,2
      CALL PAGESKP
      PRINT 1130,1WSIDE(J)
1130 FORMAT(10X,30MTARGETS DELETED BY REGION FOR ,A5,7MTARGETS /)
      PRINT 0623
      ITOTRG1=ITOTRG2=ITOTRG3=0
      IDOWNS=LLMIN(J)
      IUPS=IDOWNS+LDESIGS(J)-1
      NO 1132 I=IDOWNS,IUPS
      ITOTRG1=ITOTRG1+LDESIGNO(I,1)
      ITOTRG2=ITOTRG2+LDESIGNO(I,2)
      ITOTRG3=ITOTRG3+LDESIGNO(I,3)
      JTOTAL=LDESIGNO(I,1)+LDESIGNO(I,2)+LDESIGNO(I,3)

```

189000
190000
191000
192000
193000
194000
195000
196000
197000
197200
197400
197600
198000
198200
198600
199000
202000
203000
204000
204300
204450
204500
205000
206000
207000
208000
209000
210000
212000
213000
214000
215000
216000
217000
218000
219000
220000
220100
220200
220400
220600
222000
223000
224000
225000
226000
227000
228000
229000
230000
231000
232000
233000
234000
235000
236000

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      PRINT 8622,LDESIGS(I),LDESIGNO(I,1),LDESIGNO(I,2),
      *LDESIGNO(I,3),JTOTAL
1132 CONTINUE
      PRINT 8625
      JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3
      PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL
      8626 FORMAT(17X,4(15,5X)/)
      8625 FORMAT(1H0,17X,35H-----)
      8622 FORMAT(10X,A2,5X,4(15,5X))
      8623 FORMAT(10X,42HDESIG IREG1 IREG2 IREG3 TOTAL /)
1135 CONTINUE
      RETURN
      END

```

238000
239000
239500
240000
241000
242000
243000
244000
245000
246000
247000
249000
250000

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IDENT INDMOD

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

PROCESS	INDMOD	IDENT
EDITERM	00001	01044
EDITAPE	00015	00223
TYPENAME	01041	01173
JCARD	00004	00001
ITP	00001	00001
NOPRINT	00001	00001
MYIDENT	00001	00001
LODESIGS	03720	00004
IDESIGS	00004	03720
NODESIGS	00004	00004

EXTERNAL SYMBOLS

THEND.
OBDICT.
STORAGE
PAGESKP
INITAPE
NUMGET
INITEDIT
INPIEM
NUMDEL
COUNTDES
PRITEM
OUTITEM
NEXTITEM
SETREAD
SKIPFILE
ABORT
PRICOUNT
QAOIFUNI
EFT.
REW.
TSH.
BFI.
STM.
BFO.
QNSINGL.

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X00020 ABORT	00636						
C00312 ABRATE							
C00334 ADRLI							
C00340 ADRLR							
C00414 ADEFCHP							
C00413 ADEFZON							
C00363 AGX							
C00364 AGY							
C00367 AHOB							
C00300 ALERTDBL							
C00302 ALERTDLY							
C00203 AREA							
C00241 ASMTYPE							
C00321 ATTRCORR							
C00320 ATTRLEG							
C00325 ATTRSUPP							
C00416 AZONI							
C00417 AZON2							
C00420 AZON3							
C00361 PCODE							
P01012 BEGIN.	01013						
C00161 BENO							
X00026 BFI.	00552						
X00030 BFO.	00573						
C00210 BLEGNO							
C01003 HTYPES							
C00166 CATCODE							
C00304 CCREL							
C00267 CEP							
C00147 CLASS							
C00377 CLASSY							
P00005 CNTRLST	00335	00377	00463	00501			
C00153 CNTRYLOC	00461	00461	00477	00477			
C00152 CNTRYOWN							
C00401 CNTRYLOCY							
C00400 CNTRYOWNY							
P00762 CNTRYTL.	00304	00333	00360	00377	00422	00433	00453
	00724	00750	00751	00752	00753		
C00360 CODE							
X00012 COUNTDES	00513						
C00421 CPACTY							
P00040 CREMT.	00313	00342	00350	00365	00405	00413	00625
	00756	00756					
C00764 CUMNO							
C00213 DATEIN							
C00214 DATEOUT							
C01133 DEF							
C00323 DEFRRANGE							
C00343 DELAY							
C00244 DELTA							
C00171 DESIG	00466	00510	00515				
C00764 DESIGNO	00247	00250					
C00365 DEX							
C00366 DGY							

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INDONES

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C00370 0408
P00001 DICT.

C00437	EFCNCS2
C00440	EFCNCS2
C00327	EFFECTNES
X00023	EFT.
P01014	ENDING.
C00350	EVENT
C00351	EVENST
P00000	EXIT.
C00245	EXFRAC
C00432	FLAG
C00160	FLATNO
P00040	FORMAT.
C00154	FUNCTION
C00245	FVALHI
C00251	FVALTI
C00252	FVALT2
P00313	G6G0000.
P00342	G6G0001.
P00350	G6G0002.
P00365	G6G0003.
P00405	G6G0004.
P00413	G6G0005.
P00425	G6G0010.
P00625	G6G0011.
P00636	G6G0012.
P00656	G6G0013.
P00727	G6G0014.
P00741	G6G0015.
P00756	G6G0016.
C00163	H1
C00164	H2
C00324	MLOATTR
P01020	I
C00344	IALERT
C00354	IALT
C00224	IARDEF
C00404	IATTACK
P01021	ICFLG
C00427	ICLASS
C00373	ICLAST
C00235	ICOMPLEX
C00422	ICORR
C00424	IDBL
C00000	IDESTGS
P01022	IDOWNS
C00362	IDOOD
P00437	IDP0001.
C00216	IGW

00225	00230	00261	00267	00300	00312	00314	00327	00341	00344
00352	00364	00372	00404	00407	00412	00417	00430	00433	00465
00514	00527	00531	00533	00544	00546	00553	00557	00565	00567
00600	00605	00610	00613	00617	00624	00630	00635	00637	00645
00650	00655	00660	00663	00714	00726	00735	00740	00746	00755
00604									
00226	00760	01012							
01015									
00231	00233	00235	00236	00264	00413	00425	00445	00454	00541
00276									
00325									
00342									
00350									
00370									
00405									
00615									
00626									
00646									
00656									
00712									
00733									
00744									
00244	00673	00677	00727	01004					
00322	00324	00365	00442						
00434	00434	00437	00437						
00241	00242								
00670	00673								
00435									

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P00370	.3507	00366							
P00405	.3509	00367							
P00416	.3510								
P00423	.3512								
P00425	.3520	00415	00422						
P00521	.3732	00520							
P00524	.3733								
P00532	.4005	00470	00512						
P00445	.4958	00443							
P00450	.49581								
P00452	.49582	00447							
P00454	.49583	00451							
P00457	.4959								
P00464	.4960								
P00471	.4961	00463							
P00475	.4962	00456							
P00503	.4964	00501							
P00513	.4965	00444	00474	00502					
P00247	.500								
P00537	.60								
P00530	.91	00436	00441	00520	00523				
P00526	.92								
P00434	.995	00536							
P00442	.9951	00440							
P00040	.100000	00231							
P00041	.100001	00233							
P00042	.100002	00235							
P00043	.100003	00240							
P00044	.100004	00264							
P00116	.100005	00414							
P00117	.100006	00425							
P00120	.100007	00446							
P00121	.100008	00455							
P00122	.100009	00541							
P00140	.1130	00651							
P00123	.21	00620							
P00131	.22	00631							
P00045	.3500	00301							
P00053	.3503	00330							
P00062	.3505	00345							
P00073	.3506	00353							
P00103	.3508	00373							
P00112	.35081	00410							
P00177	.8622	00715							
P00210	.8623	00661							
P00164	.8625	00736							
P00154	.8626	00747							
P01033	J	00643	00652	00756	00357	00413	00420	00454	00454
C00000	JCARO	00306	00306	00315	00357	00413	00420	00454	00454
P01034	JPREQ	00263	00421	00424	00517	00375	00376	00400	00400
P01035	JJ	00303	00307	00307	00355	00361	00376	00400	00400
P01036	JJJ	00331	00334	00335	00355	00375	00376	00400	00400
C00014	JOUT	00274	00275	00275	00274	00275	00275	00275	00275
P01037	JTOTAL	00711	00723	00743	00753	00743	00753	00753	00753

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C00434	NOPERSQ2		
C00435	NOPERSQ3		
C00175	NOPERSQ3		
C00000	NOPRINT		
C00001	NOUT	00256	00257
C00410	NPEN	00270	00271
C00356	NTARG		
C00337	NTINT		
C00436	NUMDBL		
X00011	NUMDEL		
X00006	NUMGET	00464	00506
C00001	NV	00313	00416
C00336	NWDS		
C00355	NWPN		
C00345	NWTYPE		
X00014	OUTITEM	00530	
P00764	P00000U	00766	
P00776	P00001U	01001	
X00004	PAGESKP	00260	00644
C00412	PARRIVE		
C00264	PAYLOAD		
C00315	PDES		
C00266	PDUD		
C00277	PEN		
C00316	PFPF		
C00314	PINC		
C00317	PKMIS		
C00425	PKNAV		
C00311	PLABT		
C00352	PLACE		
C00353	PLACEN		
C00215	POP		
C00173	POSTURE		
C00313	PRABT		
C00372	PRIMETAR		
X00013	PRITEM	00526	
X00021	PRTCOUNT	00640	
C00427	PSAW		
X00002	Q8QDICT	00000	00224
X00022	Q8QIFUNI	00556	00577
X00031	Q8SINGL	00761	
C00220	RADIUS		
C00270	RANGE		
C00271	RANGEDEC		
C00272	RANGERE		
C00276	REL		
C00207	RESERVE		
X00024	REW	00607	00612
X00016	SETREAD	00543	00564
C00151	SIDE	00445	00445
C00155	SITENO		
X00017	SKIPFILE	00545	00566
C00275	SPDASH		
C00274	SPOLO		

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C00273	SPEED					
C00157	SQMMO					
X00027	STM.					
XC0003	STORAGE					
C00246	T1					
C00247	T2					
C00250	T3					
C00406	TAIM					
C00225	TARDEFHI					
C00226	TARDEFLO					
C00172	TASK					
C00431	TGTSTAT					
X00001	TEND.					
C00342	TIME					
C00341	TIMEN					
C00306	TMDEL					
C00450	TPASH					
C00310	TRETARG					
P00336	TS00004.					
P00491	TS00006.					
P00472	TS00007.					
P00504	TS00010.					
P00731	TS00012.					
X00025	TSM.					
C00305	TTOS					
C00307	TVUL					
C00150	TYPE					
C00443	TYPE1					
C00444	TYPE2					
C00372	TYPENAME					
C00376	TYPE1					
P00770	UP00000.					
P01003	UP00001.					
C00221	VAL					
C00441	VAL1					
C00442	VAL2					
C00222	VALU					
C00147	VALUE					
C00162	VULN					
C00165	MACNO					
C00240	WHDTYPE					
C00371	WHDTYPE					
P00240	WS00001.					
P00247	WS00002.					
P00304	WS00003.					
P00333	WS00004.					
P00356	WS00005.					
P00376	WS00006.					
P00461	WS00007.					
P00477	WS00010.					
P00644	WS00011.					
P00676	WS00012.					
C00257	YIELD					

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C00202 ZONE

00563 SYMBOLS

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FUNCTION MYZONE(ZLAT,ZLONG)
CSUBR MYZONE 140CT70 *****
C
C THIS SUBROUTINE DETERMINES IN WHICH DEFENSIVE ZONE A GIVEN TARGET IS
C LOCATED
C
C *****
C MYZONES 140CT70 *****
CUSE COMMON/MYZONES/BLAT(500),BLONG(500),IZIT(500),ILINK(500)
1. MINBLUE,MAXBLUE,MINRED,MAXRED
2. MINTEST,JLINK,MTEST,M1
CEND MYZONES *****
CUSE COMMON/MYSIDE/MYSIDE
CEND MYSIDE *****
IF (MYSIDE.EQ.3*RED) 101,102
101 IZMIN=MINRED
IZMAX=MAXRED
GO TO 103
102 IZMIN=MINBLUE
IZMAX=MAXBLUE
103 CONTINUE
DO 400 I=1,MTEST,M1
THETA=0.
C
C CONSIDER FIRST ZONE
C
MINTEST=MIN=IZIT(I*TIMES)
IF (MIN.LE.0) 400,104
C
C CALCULATE SUM OF ANGLES
C
104 NTEST=0
MYZONE=ITIMES
JLINK=ILINK(MIN)
X1=BLAT(MIN)
Y1=BLONG(MIN)
X2=BLAT(JLINK)
Y2=BLONG(JLINK)
Y3=DIFFLONG(Y1,ZLONG)
X3=X1-ZLAT
D1=X3-X3+Y3-Y3
IF (D1.EQ.0.) 500,201
X4=X2-ZLAT
Y4=DIFFLONG(Y2,ZLONG)
D2=X4-X4+Y4-Y4
IF (D2.EQ.0.) 500,202
SS=SQRT(D1**2)
Y5=DIFFLONG(Y1,Y2)
T=ACOS(D1/SS)
IF (X3-Y4-X4-Y3) 203,500,204
203 SIGN=-1.0
GO TO 205

```

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```

204 SIGN=1.0
205 THETA=THETA+T*SIGN
206 IF(MINTEST.EQ.JLINK) 300,206
207 MIN=JLINK
208 MTEST=MTEST+1
209 IF(MTEST.GT.25) 600,200
210 IF(ABSF(THETA).GT.6.) 500,400
400 CONTINUE
500 MYZONE=0
501 CONTINUE
502 RETURN
600 PRINT 601,MTEST,MYZONE
601 FORMAT(10X,19HLOOP IN ZONE FINDER ,I3,19H ITERATIONS IN ZONE ,I3)
STOP
END

```

5.4TS MYZONE

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

MYZONE

MYZONES
MYSIDE

EXTERNAL SYMBOLS

00311
00021

03730
00001

IDENT

MYZONE

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THEND.
Q8QSTOPS
Q8QDICT.
DIFELONG
SORTP
ACOSF
STM.
QNSINGL.

5.ATS MYZONE

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X00006	ACOSF	00140							
P00220	BEGIN.	00251	00255						
C00008	BLAT	00063	00065	00065					
C00764	BLONG	00060							
P00217	CNVRT1.	00205							
P00003	CRFMT.	00212							
P00267	DI	00077	00116	00131					
P00270	DI	00113	00117	00131					
P00001	DICT.	00023	00070	00106	00121	00124	00141	00202	00214
X00004	DIFFLONG	00067							00224
P00263	ENDING.	00024							
P00000	EXIT.	00247			00220	00221	00221	00222	00222
P00003	FORMAT.	00025							
P00071	FP00001.	00240							
P00073	FP00002.	00232							
P00103	FP00003.	00234							
P00107	FP00004.	00241							
P00260	GETPL.	00223	00236						
P00250	GETPU.	00230	00254						
P00212	GG00000.	00200							
C02734	ILINK	00056							
P00220	INITIAL.	00024			00054	00173			
P00271	ITIMES	00042							
C01750	IZIY	00045							
P00272	IZMAX	00033	00174						
P00273	IZMIN	00031	00041						
P00030	.101								
P00035	.102	00027							
P00041	.103	00034							
P00052	.104	00050							
P00055	.200	00164							
P00102	.201	00100							
P00116	.202	00114							
P00147	.203	00146							
P00151	.204	00146							
P00153	.205	00150							
P00160	.206	00157							
P00166	.300	00157							
P00173	.400	00050							
P00177	.500	00101							
P00200	.600	00185							
P00261	.ERASER.	00075	00077	00111	00113	00117	00127	00130	00132
		00136	00137	00137	00143	00145	00134	00134	00136
P00003	.100000	00026							
P00004	.601	00203							
C03725	JLINK	00056			00160	00160	00160		
C03721	MAXBLUE	00037							
C03723	MAXRED	00032							
C03727	MIN	00046	00047	00055	00055	00161			
C03720	MINBLUE	00035							
C03722	MINRED	00030							
C03724	MINTESI	00046			00156				
C00000	MYSIDE	00025							
P00021	MYZONE	00021							

5.4TS MYZONE

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C03726 NTEST 00052
P00236 PF00002. 00231
P00242 PF00003. 00237
X00003 080000. 00000
X00002 080000. 00213
X00010 080000. 00216
P00274 SIGN 00150
X00005 SGRIF 00120
P00275 SS 00122
X00007 STH. 00201
P00276 T 00142
X00001 THEND. 00210
P00277 THETA 00044
P00174 TS00001. 00042
P00215 VALUE. 00054
P00043 WS00001. 00175
P00300 X1 00060
P00301 X2 00064
P00302 X3 00074
P00303 X4 00104
P00304 Y1 00062
P00305 Y2 00066
P00306 Y3 00072
P00307 Y4 00110
P00310 Y5 00126
P00003 ZLAT 00073
P00003 ZLONG 00071
00120 SYMBOLS

00053 00161 00162 00163 00204 00204
00022
00152 00154
00135
00153
00154 00155 00165 00205 00246
00175 00175 00175 00175 00175
00072 00072 00126 00127
00075 00142 00144
00110 00111 00125
00107 00125 00144
00076 00076 00143
00112 00112 00132 00133
00073 00103 00107

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```

C SUBR      SUPROUTINE NUMDEL(II,MYDESIG,IRES)
C          NUL DEL  140CT70 *****
C
C THIS SUBROUTINE KEEPS A TALLY BY REGION AND TYPE OF THE TARGETS WHICH
C HAVE BEEN DELETED FOR EACH SIDE
C *****
C
C *****
C CUSE      LDESIGS  140CT70 *****
C          COMMON/LDESIGS/LDESIGS(500),LDESIGNO(500,3)
C          COMMON/LDESIGS/LDESIGS(2),LLMIN(2)
C          LDESIGS *****
C          DATA(LDESIGS=0,0),(LLMIN=1,251)
C *****
C C SEPARATE THE TARGET DESIGNATOR CODE (MYDESIG) INTO THE ALPHABETIC
C C (LDES) AND THE NUMERIC (KDESIG) PORTIONS
C C
C          DECODE (8,100,MYDESIG)LDES,KDESIG
C          100 FORMAT (A2,I3,3X)
C C DETERMINE THE REGION IN WHICH THE TARGET IS LOCATED
C C
C          IF (KDESIG.LT.500)1,2
C 1 CONTINUE
C          IREG = 1
C          GO TO 5
C 2 CONTINUE
C          IF (KDESIG.LT.800)3,4
C 3 CONTINUE
C          IREG = 2
C          GO TO 5
C 4 CONTINUE
C          IREG = 3
C 5 CONTINUE
C C BLUE DATA ARE STORED IN SPACES 1 THROUGH 250. RED DATA ARE STORED IN
C C SPACES 251 THROUGH 500
C C
C          KK=LLMIN(II)
C          MAX=KK+LDESIGS(II)-1
C C CHECK TO SEE WHETHER OTHER TARGETS OF THIS TYPE HAVE BEEN RECORDED
C C FOR THIS SIDE
C C
C          DO 20 J=KK,MAX
C            IF(LDES.EQ.LDESIGS(J)) 11,20
C C TARGET IS FIRST OF ITS TYPE, MAKE A RECORD OF IT TOGETHER WITH ITS
C C TYPE
C C
C 20 CONTINUE
C          J=MAX+1
C          LDESIGS(II)=LDESIGS(II)+1
C          LDESIGS(J)=LDES

```

1000
18000
2000
3000
4000
5000
6000
7000
8000
9000
10000
1000
2000
10000
11000
12000
13000
14000
15000
16000
17000
18000
19000
20000
21000
22000
23000
24000
25000
26000
27000
28000
29000
30000
31000
32000
33000
34000
35000
36000
37000
38000
39000
40000
41000
42000
43000
44000
45000
46000
47000
48000
49000
50000
51000
52000

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C INCREMENT THE NUMBER OF TARGETS OF THIS TYPE (IN THE APPROPRIATE
C REGION) BY ONE
C
11 CONTINUE
LDESIGNO(J,IREQ)=LDESIGNO(J,IREQ)+1
RETURN
END

53000
54000
55000
56000
57000
58000
59000
60000

1040

5.4TS NUMDEL

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

NUMDEL

00216
00010

LOESIGS
LODESIGS

03720
00004

EXTERNAL SYMBOLS

TMEMO.
Q80DICT.
DEC.
QMSINOL.

IDENT

NUMDEL

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EO 0

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3

P00136	REGIN.	00172	00200	00204			
P00106	CNVRT1.	00020	00022				
P00003	CRFMT.	00026					
X00003	DEC.	00015					
P00001	DICT.	00012	00016	00025	00142	00143	
P00173	ENDING.	00013	00104	00137	00140	00141	00141
P00000	EXIT.	00174					
P00003	FORMAT.						
P00017	FP00001.	00157					
P00031	FP00002.	00164	00165				
P00040	FP00003.	00166	00167				
P00044	FP00004.	00170	00171				
P00047	FP00005.	00151	00152				
P00073	FP00006.	00153	00154				
P00127	FP00007.	00162	00163				
P00207	GETPL.	00144	00155				
P00177	GETPU.	00147	00160	00203			
P00026	GG00000.	00014					
P00003	II	00047	00073				
P00107	INC0003.	00101	00113	00123	00134		
P00137	INITIAL.	00013					
P00003	IREG	00032	00041	00045	00127		
P00031	.1						
P00101	.11	00063					
P00064	.20	00062					
P00035	.2	00027	00030				
P00040	.3						
P00044	.4	00036	00037				
P00047	.5	00034	00043				
P00003	.5.100	00017	00061	00064	00071	00077	00120
P00211	J	00055					
P00212	KDESIG	00023	00026	00035			
P00213	KK	00051	00054				
P00214	LDOS	00021	00060	00076			
C00764	LDESIHO	00102	00102	00103			
C00000	LDESIGS	00061	00062	00077	00100		
C00002	LLMIN	00002	00050	00050			
C00000	LODESIGS	00003	00052	00052	00074	00075	
P00215	MAX	00054	00066	00070			
P00003	MYDESIG	00017					
P00010	NUMDEL	00019					
P00113	P00000-U	00115					
P00155	PF00002.	00150					
P00160	PF00003.	00156					
P00172	PF00004.	00161					
X00002	QSDICT.	00000					
X00004	QNSINGL.	00105	00011				
P00111	RELCON..	00134					
X00001	THEND.	00024					
P00046	TS00001.	00057	00065	00072	00113	00120	00121
P00117	UP00000.	00054	00042	00046	00110	00130	00131
P00126	UP00002.	00033			00132	00134	00135
P00060	WS00001.	00067					
	00065 SYMBOLS						

1000
19000
2000
3000
4000
5000
6000
7000
8000
9000
10000
1500
10000
11000
12000
13000
14000
15000
16000
17000
18000
19000
20000

5.1TS PRINTIT

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

PRINTIT

PRINTS

EXTERNAL SYMBOLS

Q8QDICT.
PRITEM

IDENT

00023

00003

00003

PRINTIT

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0

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1044

5.4TS PRINTIT

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3

P00021 BEGIN.
P00001 DICT.
P00022 ENDING.
P00000 EXIT.
C00000 IFREQ
P00021 INITIAL.
C00002 IPRINT
C00001 IPRT
P00007 .0519
P00011 .0520
P00014 .0521
P00020 .0522
P00016 .0523
P00003 PRINTIT
X00002 PRITEM
X00001 QRDICT.
60020 SYMBOLS

00021
00005
00006
00022
00013
00006
00007
00011
00010
00013
00003
00016
00000

00017
00020
00007
00011
00013
00004

00012 00014 00015

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```

SUBROUTINE PRICOUNT
  CSUBR   PRICOUNT 140CT70 *****
  C
  C THIS SUBROUTINE EFFECTS THE PRINTING OF THE RECORDS OF TARGET COUNT
  C BY REGION WHICH WERE KEPT BY SUBROUTINE CNTDES FOR THE TARGETS
  C PROCESSED AND KEPT BY SUBROUTINE INDMOD
  C *****
  C
  C *****
  CUSE    IDESIGS 140CT70 *****
  CCOMMON/IDESIGS/IDESIGS(500),DESIGNO(500,3)
  CCOMMON/NODESIGS/NODESIGS(2),KKMIN(2)
  CTYPE INTER DESIGNO
  CEND     IDESIGS *****
  CUSE    INSIDE 140CT70 *****
  CDIMENSION INSIDE(2) *****
  CINSIDE *****
  CINSIDE(1)=4HBLUE
  CINSIDE(2)=3HRED
  CDO 7555 J=1,2
  CALL PAGESMP
  PRINT 8620, INSIDE(J)
  8620 FORMAT(10X,27HTARGET COUNT BY REGION FOR ,A5,7HTARGETS /)
  PRINT 8623
  ITOTRG1=ITOTRG2=ITOTRG3=0
  IDOWNS=KKMIN(J)
  IUPS=IDOWNS+NODESIGS(J)-1
  DO 8621 I=IDOWNS,IUPS
  C
  C INCREMENT THE TOTAL NUMBER OF TARGETS PER REGION WHICH HAVE BEEN
  C PRINTED
  C
  C
  ITOTRG1=ITOTRG1+DESIGNO(I,1)
  ITOTRG2=ITOTRG2+DESIGNO(I,2)
  ITOTRG3=ITOTRG3+DESIGNO(I,3)
  JTOTAL=DESIGNO(I,1)+DESIGNO(I,2)+DESIGNO(I,3)
  C
  C PRINT THE NUMBER OF TARGETS BY TYPE THAT ARE PRESENT IN EACH REGION
  C
  8621 PRINT 8622,IDESIGS(I),DESIGNO(I,1),DESIGNO(I,2),DESIGNO(I,3),
  *JTOTAL
  PRINT 8625
  JTOTAL=ITOTRG1+ITOTRG2+ITOTRG3
  C
  C PRINT THE TOTALS FOR EACH REGION
  C
  C
  PRINT 8626,ITOTRG1,ITOTRG2,ITOTRG3,JTOTAL
  8626 FORMAT(17X,4(15,5X)/)
  8625 FORMAT(1H0,17X,35H-----)
  8622 FORMAT(10X,A2,5X,4(15,5X))
  8623 FORMAT(10X,A2,4HNODESIG IREG1 IREG2 IREG3 TOTAL /)
  7555 CONTINUE
  RETURN
  END

```

5.4TS PRTCOUNT

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

00232

00372

IOESIGS
NODESIGS

03720

00004

EXTERNAL SYMBOLS

THEND.
Q8ONICT.
PAGE8KP
8TH.
QNSINGL.

IDENT

PRTCOUNT

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0

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2

5.4TS PRTCOUNT

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P00220 BEGIN.	00220								
P00217 CNVRT1.	00111	00155	00156	00137	00166	00142	00205	00206	00207
P00005 CRFMT.	00114	00213	00213	00213	00213				
C000764 DESIGNO	00134	00135	00137	00137	00141	00142	00143	00144	00145
	00157	00160							00156
P00001 DICT.	00074	00103	00106	00113	00116	00121	00151	00164	00175
	00212								00203
P00221 ENDING.	00075	00215							
P00000 EXIT.	00221								
P00005 FORMAT.	00074	00100							
P00114 GG00000.	00104								
P00122 GG00001.	00114								
P00165 GG00002.	00147								
P00176 GG00003.	00170								
P00213 GG00004.	00201								
P00222 I	00131	00134	00153	00165					
C00000 IDESIGS	00154								
P00223 IDOWNS	00126	00131							
P00220 INITIAL.	00075								
P00224 ITOTR61.	00124	00133	00139	00176	00205				
P00225 ITOTR62	00123	00136	00140	00177	00206				
P00226 ITOTR63	00123	00141	00143	00177	00207				
P00227 IUPS	00130	00166							
P00003 IWSINE	00077	00100	00111						
P00213 .7555									
P00147 .8621									
P00005 ..100000	00076								
P00006 ..100001	00100								
P00007 ..8620	00107								
P00046 ..8622	00152								
P00057 ..8623	00117								
P00033 ..8625	00173								
P00023 ..8626	00204								
P00230 J	00101	00110	00213						
P00231 JTOTAL	00146	00161	00200	00210					
C00002 KKM1N	00124	00125							
C00000 NODESIGS	00126	00127							
X00003 PAGE5KP	00102								
P00072 PRTCOUNT	00072								
X00002 QRDICT.	00000								
X00005 QNSINGL.	00216								
X00004 STH.	00105	00115	00150	00171	00202				
X00001 TEND.	00112	00120	00163	00174	00211				
P00166 TS00002.	00132								
P00102 WS00001.	00214								
P00133 WS00002.	00167								

00054 SYMBOLS

RDTYPES

IDENT

00207
00034
00460

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES
EXTERNAL SYMBOLS

THEND.
Q8GSTOP8
Q8DDICT.
NUMGET
TSH.
STM.
QNSINGL.

[illegible]

FTNS.5

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```

MYIDENT =SHSTAKTYPE
CALL SETREAD
C CALL ROARRAY TO BPING IN COMMON/XLAT/
C
C CALL ROARRAY(XLAT(1),4686)
C
C BRING IN COMMON/MYZONES/
C
C CALL ROARRAY(RLAT(1),2008)
C
C END OF PROCESSING, CLOSE FILES AND EXIT
C
CALL TERMTEAPE
00 90 I=1,2
XTEST(I)=3.
MAHI(I)=7
FACLOW=.5
MAXLOW(1)=3
MAXLOW(2)=2
RETURN
END

```

90

41000
42000
43000
44000
45000
46000
47000
48000
49000
50000
51000
52000
53000
54000
55000
56000
57000
58000
59000
60000
61000
62000

5.ATS STKRIN

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

STKRIN

ITP

NOPRINT

MYIDENT

XLAT

JSIDE

MYZONES

EXTERNAL SYMBOLS

Q8QDICT.

SETREAD

RDARRAY

TERMTAPE

IDENT

00053

00004

00001

00001

00001

11116

00001

03730

STKRIN

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5.4TS STKRIN

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C10460	ATEST				
P00042	BEGIN.	00043			
C00000	BLAT	00023			
C00764	B LONG				
P00001	DICT.	00006	00015	00017	00025
P00044	ENDING.	00007	00041	00042	
P00000	EXIT.	00045			
C11074	FAFLOW	00035	00035		
P00003	FORMAT.	00012			
P00052	I	00027	00027		
C11104	IMIGH				
C02734	ILINK				
C11102	ILOW				
P00042	INITIAL.	00007			
C11106	ITARTAPE				
C00000	ITP				
C01750	IZIT				
P00034	.90				
P00003	..100000	00012			
C11112	JAREAS				
C07640	JINDEX				
C11110	JJLOW				
C03725	JLINK				
C11114	JLOCS				
C00000	JSIDE				
C11076	LAREAS				
C10150	LINDEX				
C11160	LLOW				
C03721	MAXBLUE				
C11070	MAXHI	00033			
C11072	MAXLOW	00037	00040		
C03723	MAXREN				
C03727	MIN				
C03720	MINBLUE				
C03722	MINRED				
C03724	MINTEST				
C00000	MYIDENT	00013	00013		
C10770	NBAREAS				
C05670	NBATS				
C00000	NOPRINT	00010	00011		
C10771	NRAREAS				
C10772	NTARSHI				
C11016	NTARSLO				
C11042	NTARTEST				
C03726	NTEST				
X00001	OBODICT.	00000	00005		
C03720	RADIUS				
X00003	RDARRAY	00016	00021		
X00002	SETREAD	00014			
P00004	STKRIN	00004			
X00004	TERMTAPE	00024			
P00031	WS00001.	00036			
C00000	XLAT	00020			
C01750	XLONG				

5.4TS STKRIN

C11066 KTEST 00032 00032
00067 SYMBOLS

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ED

0

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1056

1057

```

C *****
C JAREFLO SHOULD BE ASSIGNED TO A GIVEN TARGET
C LAREAS(NS)      NUMBER OF AREAS INTO WHICH SAM SITES ARE DIVIDED
C LNLOW(NS)       1. 101 - THE BEGINNING INDICES OF THE AREAS
C ILOW(NS)        INDEX INDICATING WHERE STORAGE OF DATA BEGINS FOR
C                 BLUE, RED, RESPECTIVELY, IN NTARSHI, NTAWSLO,
C                 NTARTST
C C IHIGH(NS)      7. 17 - INDEX INDICATING WHERE THE STORAGE OF DATA
C                 ENDS FOR BLUE, RED, RESPECTIVELY, IN THE ABOVE
C                 MENTIONED ARRAYS
C ITARTAPE(NS)    NOT USED
C JULOW(NS)       BEGINNING INDICES OF SAM COMPLEXES FOR BLUE AND RED,
C                 RESPECTIVELY
C JAREAS(NS)      NUMBER OF AREAS INTO WHICH COMPLEXES ARE DIVIDED
C JCLOS(NS)       NUMBER OF SAM COMPLEXES FOR EACH SIDE
C *****
DATA(XTEST=3.,3.), (MAXHI=7.71, (MAXLOW=3.2), (FACLOW=.5,.5))
JTARMI=JTBARLO=0
IF(JSIDE.EQ.3*RED) 20,21
  JSIDE=2
  GO TO 22
  JSIDE=1
C *****
C DETERMINE IN WHICH AREA THE TARGET IS LOCATED
C *****
22 NHIGH=LAREAS(JSIDE)
   NLOW=LNLOW(JSIDE)
   DO 1 IN=NLOW,NHIGH
     IF(YLONG.LT.ATEST(IN)) 2.1
     CONTINUE
     GO TO 11
   KLO=JINDEX(IN)
   KHI=LINDEX(IN)
C CONSIDER THE FIRST SITE IN THE AREA
C *****
C DO 10 KKLO,KHI
C *****
C IS THE TARGET WITHIN THIS SITE
C *****
YTEST=DIFFLONG(XLONG(K),YLONG)
IF(YTEST.GT.ATEST(JSIDE)) 11,3
IF(ABS(F(YTEST).GT.X*EST(JSIDE)) 10.4
DIST=DSFF(YLAT,XLAT(K),YTEST)
IF(DIST.LE.RADIUS(K)) 5,10
NINDEX=NINDEX+PINRATTS(K),JSIDE)
C *****
C ASSIGN VALUE OF JTARMI
C *****
JTARMI=JTARMI+NTARSHI(NINDEX)
IF(JTARMI.GT.MAXH?(JSIDE)) 6,7
JTARMI=MAXHI(JSIDE)
C *****
C SHOULD VALUE OF JTARLO BE ASSIGNED

```

IN5.5

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3

```
7 IF (DIST.LE.(RADIUS(K)*FACLOW(JSIDE))) 8,10
C ASSIGN VALUE OF JTARLO
C
8 JTARLO=JTARLO+TARSL0(NINDEX)
9 IF (JTARLO.GT.MAXLOW(JSIDE)) 9,10
JTARLO=MAXLOW(JSIDE)
10 CONTINUE
11 RETURN
END
```

106000
107000
108000
109000
110000
111000
112000
113000
114000
115000

1059

S.ATS

TARDEFS

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

TARDEFS

XLAY
JSIDE

EXTERNAL SYMBOLS

00254
00004
11116
00001

IDENT

TARDEFS

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ED

0

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1060

C10460 ATEST	00033	00033			
P00150 BEGIN.	00233	00237			
F00001 DICT.	00054	00074	00145	00153	00154
X00002 DIFFLONG					
P00243 DIST	00077	00127			
X00033 OSTF	00073				
P00226 ENDING.	00007	00150	00151	00142	00152
P00000 EXIT.	00231				
C11074 FACLOW	00124	C11074			
P00003 FORMAT.	00013				
P00010 FP00001.	00204	00207			
P00012 FP00002.	00162	00163			
P00013 FP00003.	00222	00223			
P00031 FP00004.	00215	00216			
P00055 FP00005.	00217				
P00075 FP00006.	00212				
P00106 FP00007.	00224				
P00110 FP00010.	00164	00165			
P00113 FP00011.	00166	00167			
P00114 FP00012.	00170	00171			
P00122 FP00013.	00172	00173			
P00131 FP00014.	00200	00201			
P00134 FP00015.	00202	00203			
P00135 FP00016.	00204	00205			
P00143 FP00017.	00176	00177			
P00242 GETPL.	00155	00174			
P00232 GETPU.	00160	00210	00236		
C11104 HIGH		00228			
C11102 LOW					
P00244 IN	00027	00032	00036	00042	
X00004 INDEXTYP	00104				
P00150 INITIAL.	00007				
P00003 ISIDE	00013	00106			
C11106 ITARTAPE					
P00036 .1	00034	00034			
P00144 .10	00070	00101	00130	00140	00140
P00147 .11	00041	00062			
P00016 .20					
P00042 .2	00035				
P00020 .21	00015				
P00022 .22	00017				
P00063 .3	00061	00061			
P00071 .4	00067	00070			
P00102 .5	00101				
P00120 .6					
P00123 .7	00117	00117			
P00131 .8	00130				
P00141 .9					
P00003 .100000	00014				
P00055 .200001.	00052				
P00075 .200002.	00072				
P00106 .200003.	00103				
C11112 JAREAS					
C07640 JINDEX	00043	00043			

C1110	JULOW	00017	00020	00021	00022	00022	00057	00057	00065	00066	00115
C1114	JLCS	00115	00120	00120	00125	00125	00136	00141	00141		
C0000	JSIDE	00012	00110	00114	00122	00122					
P00003	JTARMI	00011	00131	00135	00143	00143					
P00003	JTARLO	00047	00051	00102	00123	00144					
P00245	K	00046	00145								
P00246	KMI	00044	00047								
P00247	KLO	00023	00023								
C11076	LAREAS	00045	00045								
C10150	LINDEX	00024	00025								
C11100	LNLOW	00116	00116								
C11070	MAXMI	00137	00137								
C11072	MAXLOW		00121	00121	001070						
C10770	NHAREAS		00142	00142	C11072						
C05670	NBATTIS	00103	00106								
P00250	NHIGH	00024	00037								
P00251	NINDEX	00107	00111								
P00252	NLOW	00026	00027								
C10771	NHAREAS										
C10772	NHAREAS	00112	00112								
C11016	NHAREAS	00133	00133								
C11042	NHAREAS										
P00174	NHAREAS	00161	00161								
P00210	NHAREAS	00175	00175								
P00213	NHAREAS	00211	00211								
P00220	NHAREAS	00214	00214								
P00225	NHAREAS	00221	00221								
X: 001	NHAREAS	00000	00000								
C03720	NHAREAS	00100	00100								
P00004	NHAREAS	00004	00004								
P00037	NHAREAS	00030	00030								
P00145	NHAREAS	00040	00040								
P00031	NHAREAS	00040	00040								
P00051	NHAREAS	00144	00144								
C00003	NHAREAS	00072	00072								
C01750	NHAREAS	00052	00052								
C11066	NHAREAS	00003	00003								
P00003	NHAREAS	00074	00074								
P00003	NHAREAS	00031	00031								
P00253	NHAREAS	00056	00056								
	NHAREAS										

00136 SYMBOLS


```

C
CE=0
CUSE
  DIMENSION KZON(3)
  MPIT *****
  1 *****
  COMMON/1/NI5L,NIN,NCOL,NTIME,X(4000),Y(4000),Z(4000),IND(4000)
  DIMENSION STATUS(12000)
  EQUIVALENCE(STATUS,X)

C
C NI5L = NUMBER OF COLLOCATED ISLANDS
C NM = INDEX TO COLAR
C NCOL = NUMBER OF COLLOCATED TARGETS
C NTIME = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.
C X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE
C IWO = INDEX NUMBER OF X,Y,Z
C STATUS = PACKED DATA FOR TARGETS

C
CE=0
CUSE
  1 *****
  2 *****
  COMMON/2/COL(4000), CL(4000),CLT(4000),CP(4000)
  TYPE LOGICAL COL,CL,CLT,CP

C
C
CE=0
CUSE
  2 *****
  3 *****
  COMMON/3/ICUM, ISTORE,COLAR(100), COMPLEX(4000)
  TYPE INTEGER COLAR, COMPLEX
  DIMENSION CRUIST(100),CVULN(100)
  TYPE INTEGER CVULN
  EQUIVALENCE(ICRUIST,COMPLEX),(CVULN,COMPLEX(101))

C
CE=0
CUSE
  3 *****
  4 *****
  COMMON/4/MULL, CUMNO(15), RTYPES(15), INDCLAS (15),
  IENDREG(250),TYPEPAR(80,15),TYPEPL(40,15),
  PIADCUR(250),BOM(80,7),
  3 TANK(40,5),ASWT(20,2),MH(50,3),7CMES(75,3),
  ACAPACTY(50,2),ICMR(250), MIV(R0,2),
  SIMMTYP(50,2),INDOS(50,2),INDECS(40,2),INANGEC(40,2)
  6,INDCLAS(15)
  DIMENSION FMIS(R0,11),MIS(P0,11)
  DIMENSION NEWIND(4000)
  EQUIVALENCE(NEWIND,MIS,F+IS,TYPEPAR(251))
  TYPE INTEGER TYPEPAR, TYPEPL, CUMNO, RTYPES
  DIMENSION IOM(R0,7),ITANK(40,5)
  EQUIVALENCE(IOM,BOM),(ITANK,TANK)

C
CE=0
CUSE
  4 *****
  5 *****
  COMMON/5/ NTDEF, ITEM(512), NTIN(1512)

C
CE=0
CUSE
  5 *****
  7 *****
  COMMON/7/COLOC(12000),COMP(12000)
  DIMENSION LITER4(12000)
  TYPE LOGICAL COLOC,COMP,LITER4

```


EQUVALENCE(NAJOP) VALUE(17))
 TYPE INTERP NAJOP
 EQUVALENCE(WINOP) VALUE(18))
 TYPE INTERP WINOP
 EQUVALENCE(DESIG) VALUE(19))
 TYPE INTERP DESIG
 EQUVALENCE(TASK) VALUE(20))
 TYPE INTERP TASK
 EQUVALENCE(POSTURE) VALUE(21))
 TYPE INTERP POSTURE
 EQUVALENCE(INDEXNO) VALUE(22))
 TYPE INTERP INDEXNO
 EQUVALENCE(INDEXNO) VALUE(23))
 TYPE INTERP INDEXNO
 EQUVALENCE(POSTURE) VALUE(24))
 TYPE INTERP POSTURE
 EQUVALENCE(POSTURE) VALUE(25))
 TYPE INTERP POSTURE
 EQUVALENCE(WINCON) VALUE(26))
 TYPE INTERP WINCON
 EQUVALENCE(LINK) VALUE(27))
 TYPE INTERP LINK
 EQUVALENCE(ZONE) VALUE(28))
 TYPE INTERP ZONE
 EQUVALENCE(ASCA) VALUE(29))
 TYPE REAL ASCA
 EQUVALENCE(LAT) VALUE(30))
 TYPE REAL LAT
 EQUVALENCE(LONG) VALUE(31))
 TYPE REAL LONG
 EQUVALENCE(LFTRG) VALUE(32))
 TYPE INTERP LFTRG
 EQUVALENCE(PRESERVE) VALUE(33))
 TYPE INTERP PRESERVE
 EQUVALENCE(MUSNO) VALUE(34))
 TYPE INTERP MUSNO
 EQUVALENCE(MUSNO) VALUE(35))
 TYPE INTERP MUSNO
 EQUVALENCE(IPJINT) VALUE(36))
 TYPE INTERP IPJINT
 EQUVALENCE(POINT) VALUE(37))
 TYPE REAL POINT
 EQUVALENCE(INTERP) VALUE(38))
 TYPE REAL INTERP
 EQUVALENCE(INTERP) VALUE(39))
 TYPE REAL INTERP
 EQUVALENCE(INTERP) VALUE(40))
 TYPE INTERP INTERP
 EQUVALENCE(MUSNO) VALUE(41))
 TYPE INTERP MUSNO
 EQUVALENCE(MUSNO) VALUE(42))
 TYPE REAL MUSNO
 EQUVALENCE(MUSNO) VALUE(43))
 TYPE REAL MUSNO
 EQUVALENCE(MUSNO) VALUE(44))
 TYPE REAL MUSNO

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EQUIVALENCE (MISDEF, *VALUE(45))
 TYPE INTEGER MISDEF
 EQUIVALENCE (IMDEF, *VALUE(46))
 TYPE INTEGER IMDEF
 EQUIVALENCE (ICDEF-HI, *VALUE(47))
 TYPE INTEGER ICDEF-HI
 EQUIVALENCE (ICDEF-LO, *VALUE(48))
 TYPE INTEGER ICDEF-LO
 EQUIVALENCE (ICLASS, *VALUE(49))
 TYPE INTEGER ICLASS
 EQUIVALENCE (ITYPE, *VALUE(50))
 TYPE INTEGER ITYPE
 EQUIVALENCE (IAGE, *VALUE(51))
 TYPE INTEGER IAGE
 EQUIVALENCE (IREFUEL, *VALUE(52))
 TYPE INTEGER IREFUEL
 EQUIVALENCE (IOTHER, *VALUE(53))
 TYPE INTEGER IOTHER
 EQUIVALENCE (IGROUP, *VALUE(54))
 TYPE INTEGER IGROUP
 EQUIVALENCE (ICOMPLEX, *VALUE(55))
 TYPE INTEGER ICOMPLEX
 EQUIVALENCE (ITGT, *VALUE(56))
 TYPE INTEGER ITGT
 EQUIVALENCE (JTYPE, *VALUE(57))
 TYPE INTEGER JTYPE
 EQUIVALENCE (NMNTYPE, *VALUE(58))
 TYPE INTEGER NMNTYPE
 EQUIVALENCE (ASATYPE, *VALUE(59))
 TYPE INTEGER ASATYPE
 EQUIVALENCE (INDEXCVS, *VALUE(60))
 TYPE INTEGER INDEXCVS
 EQUIVALENCE (IFRAC, *VALUE(61))
 TYPE REAL IFRAC
 EQUIVALENCE (DELTA, *VALUE(62))
 TYPE REAL DELTA
 EQUIVALENCE (FVALM1, *VALUE(63))
 TYPE REAL FVALM1
 EQUIVALENCE (F1, *VALUE(64))
 TYPE REAL F1
 EQUIVALENCE (F2, *VALUE(65))
 TYPE REAL F2
 EQUIVALENCE (F3, *VALUE(66))
 TYPE REAL F3
 EQUIVALENCE (FVALT1, *VALUE(67))
 TYPE REAL FVALT1
 EQUIVALENCE (FVALT2, *VALUE(68))
 TYPE REAL FVALT2
 EQUIVALENCE (MURKILL, *VALUE(69))
 TYPE REAL MURKILL
 EQUIVALENCE (MAXKILL, *VALUE(70))
 TYPE REAL MAXKILL
 EQUIVALENCE (MAXFACV, *VALUE(71))
 TYPE REAL MAXFACV
 EQUIVALENCE (MAXFACTV, *VALUE(72))
 TYPE REAL MAXFACTV

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EQUIVALENCE (TYPE) VALUE (733)
 TYPE REAL TYPE
 EQUIVALENCE (ALPH-1) VALUE (743)
 TYPE INTEGER (ALPH-1)
 EQUIVALENCE (ALPH-2) VALUE (753)
 TYPE INTEGER (ALPH-2)
 EQUIVALENCE (ALPH-3) VALUE (763)
 TYPE INTEGER (ALPH-3)
 EQUIVALENCE (ALPH-4) VALUE (773)
 TYPE INTEGER (ALPH-4)
 EQUIVALENCE (ALPH-5) VALUE (783)
 TYPE INTEGER (ALPH-5)
 EQUIVALENCE (ALPH-6) VALUE (793)
 TYPE INTEGER (ALPH-6)
 EQUIVALENCE (ALPH-7) VALUE (803)
 TYPE INTEGER (ALPH-7)
 EQUIVALENCE (ALPH-8) VALUE (813)
 TYPE INTEGER (ALPH-8)
 EQUIVALENCE (ALPH-9) VALUE (823)
 TYPE INTEGER (ALPH-9)
 EQUIVALENCE (ALPH-10) VALUE (833)
 TYPE INTEGER (ALPH-10)
 EQUIVALENCE (ALPH-11) VALUE (843)
 TYPE INTEGER (ALPH-11)
 EQUIVALENCE (ALPH-12) VALUE (853)
 TYPE INTEGER (ALPH-12)
 EQUIVALENCE (ALPH-13) VALUE (863)
 TYPE INTEGER (ALPH-13)
 EQUIVALENCE (ALPH-14) VALUE (873)
 TYPE INTEGER (ALPH-14)
 EQUIVALENCE (ALPH-15) VALUE (883)
 TYPE INTEGER (ALPH-15)
 EQUIVALENCE (ALPH-16) VALUE (893)
 TYPE INTEGER (ALPH-16)
 EQUIVALENCE (ALPH-17) VALUE (903)
 TYPE INTEGER (ALPH-17)
 EQUIVALENCE (ALPH-18) VALUE (913)
 TYPE INTEGER (ALPH-18)
 EQUIVALENCE (ALPH-19) VALUE (923)
 TYPE INTEGER (ALPH-19)
 EQUIVALENCE (ALPH-20) VALUE (933)
 TYPE INTEGER (ALPH-20)
 EQUIVALENCE (ALPH-21) VALUE (943)
 TYPE INTEGER (ALPH-21)
 EQUIVALENCE (ALPH-22) VALUE (953)
 TYPE INTEGER (ALPH-22)
 EQUIVALENCE (ALPH-23) VALUE (963)
 TYPE INTEGER (ALPH-23)
 EQUIVALENCE (ALPH-24) VALUE (973)
 TYPE INTEGER (ALPH-24)
 EQUIVALENCE (ALPH-25) VALUE (983)
 TYPE INTEGER (ALPH-25)
 EQUIVALENCE (ALPH-26) VALUE (993)
 TYPE INTEGER (ALPH-26)
 EQUIVALENCE (ALPH-27) VALUE (1003)
 TYPE INTEGER (ALPH-27)

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```

EQUIVALENCE(PHART, *VALUE( 101))
TYPE REAL PHART
EQUIVALENCE(PINC, *VALUE( 102))
TYPE REAL PINC
EQUIVALENCE(PRES, *VALUE( 103))
TYPE REAL PRES
EQUIVALENCE(PPEF, *VALUE( 104))
TYPE REAL PPEF
EQUIVALENCE(PPMIS, *VALUE( 105))
TYPE REAL PPMIS
EQUIVALENCE(ATTRLEG, *VALUE( 106))
TYPE REAL ATTRLEG
EQUIVALENCE(ATTRCORR, *VALUE( 107))
TYPE REAL ATTRCORR
EQUIVALENCE(KO+STYLE, *VALUE( 108))
TYPE INTEGER KO+STYLE
EQUIVALENCE(DEFRANGE, *VALUE( 109))
TYPE REAL DEFRANGE
EQUIVALENCE(MILOATTR, *VALUE( 110))
TYPE REAL MILOATTR
EQUIVALENCE(ATTRSUPP, *VALUE( 111))
TYPE REAL ATTRSUPP
EQUIVALENCE(I1+TYPE2, *VALUE( 112))
TYPE INTEGER I1+TYPE2
EQUIVALENCE(EFFECTNES, *VALUE( 113))
TYPE REAL EFFECTNES
EQUIVALENCE(ESITE, *VALUE( 114))
TYPE INTEGER ESITE
EQUIVALENCE(IVULN, *VALUE( 115))
TYPE INTEGER IVULN
EQUIVALENCE(NADBLT, *VALUE( 116))
TYPE REAL NADBLT
EQUIVALENCE(NADBLR, *VALUE( 117))
TYPE REAL NADBLR
EQUIVALENCE(ADHLI, *VALUE( 118))
TYPE REAL ADHLI
EQUIVALENCE(NBHEADC, *VALUE( 119))
TYPE INTEGER NBHEADC
EQUIVALENCE(NMHDS, *VALUE( 120))
TYPE INTEGER NMHDS
EQUIVALENCE(NTINT, *VALUE( 121))
TYPE INTEGER NTINT
EQUIVALENCE(ADHLR, *VALUE( 122))
TYPE REAL ADHLR
EQUIVALENCE(TIMEN, *VALUE( 123))
TYPE REAL TIMEN
EQUIVALENCE(TIME, *VALUE( 124))
TYPE REAL TIME
EQUIVALENCE(DELAY, *VALUE( 125))
TYPE REAL DELAY
EQUIVALENCE(IALERT, *VALUE( 126))
TYPE INTEGER IALERT
EQUIVALENCE(N+TYPE, *VALUE( 127))
TYPE INTEGER N+TYPE
EQUIVALENCE(INOV, *VALUE( 128))
TYPE INTEGER INOV

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```

EQUIVLFNCE(IINTAP) *VALUE( 129))
TYPE INTEGER IINTAP
EQUIVLFNCE(EVENT) *VALUE( 130))
TYPE INTEGER EVENT
EQUIVLFNCE(EVENTN) *VALUE( 131))
TYPE INTEGER EVENTN
EQUIVLFNCE(PLACE) *VALUE( 132))
TYPE INTEGER PLACE
EQUIVLFNCE(PLACEN) *VALUE( 133))
TYPE INTEGER PLACEN
EQUIVLFNCE(IALT) *VALUE( 134))
TYPE INTEGER IALT
EQUIVLFNCE(NMPNS) *VALUE( 135))
TYPE INTEGER NMPNS
EQUIVLFNCE(NTARG) *VALUE( 136))
TYPE INTEGER NTARG
EQUIVLFNCE(MCODE) *VALUE( 137))
TYPE INTEGER MCODE
EQUIVLFNCE(CODE) *VALUE( 138))
TYPE INTEGER CODE
EQUIVLFNCE(MCODE) *VALUE( 139))
TYPE INTEGER MCODE
EQUIVLFNCE(IDUO) *VALUE( 140))
TYPE INTEGER IDUO
EQUIVLFNCE(AGX) *VALUE( 141))
TYPE INTEGER AGX
EQUIVLFNCE(AGY) *VALUE( 142))
TYPE INTEGER AGY
EQUIVLFNCE(OGX) *VALUE( 143))
TYPE INTEGER OGX
EQUIVLFNCE(UGY) *VALUE( 144))
TYPE INTEGER UGY
EQUIVLFNCE(IGY) *VALUE( 145))
TYPE INTEGER IGY
EQUIVLFNCE(AHOB) *VALUE( 146))
TYPE INTEGER AHOB
EQUIVLFNCE(DHOB) *VALUE( 146))
TYPE INTEGER DHOB
EQUIVLFNCE(MHOTYPEN) *VALUE( 147))
TYPE INTEGER MHOTYPEN
EQUIVLFNCE(PHIMETAR) *VALUE( 148))
TYPE INTEGER PHIMETAR
EQUIVLFNCE(ICLASST) *VALUE( 149))
TYPE INTEGER ICLASST
EQUIVLFNCE(IITYPE) *VALUE( 150))
TYPE INTEGER IITYPE
EQUIVLFNCE(JITYPE) *VALUE( 151))
TYPE INTEGER JITYPE
EQUIVLFNCE(JTYPFT) *VALUE( 152))
TYPE INTEGER JTYPFT
EQUIVLFNCE(TYPE) *VALUE( 153))
TYPE INTEGER TYPE
EQUIVLFNCE(ICLASST) *VALUE( 153))
TYPE INTEGER ICLASST
EQUIVLFNCE(CNTYOWNT) *VALUE( 154))
TYPE INTEGER CNTYOWNT
EQUIVLFNCE(CNTYLOCT) *VALUE( 155))
TYPE INTEGER CNTYLOCT
EQUIVLFNCE(IPENMODE) *VALUE( 156))
TYPE INTEGER IPENMODE

```

```

EQUIVALENCE(IHECMODE,VALUE( 157))
TYPE INTEGER IHECMODE
EQUIVALENCE(IATTACK,VALUE( 158))
TYPE INTEGER IATTACK
EQUIVALENCE(INAL,VALUE( 159))
TYPE INTEGER INAL
EQUIVALENCE(ITAIM,VALUE( 160))
TYPE INTEGER ITAIM
EQUIVALENCE(MMHOS,VALUE( 161))
TYPE INTEGER MMHOS
EQUIVALENCE(MPEN,VALUE( 162))
TYPE INTEGER MPEN
EQUIVALENCE(MDET,VALUE( 163))
TYPE INTEGER MDET
EQUIVALENCE(PARRIVE,VALUE( 164))
TYPE REAL PARRIVE
EQUIVALENCE(ADEFZON,VALUE( 165))
TYPE INTEGER ADEFZON
EQUIVALENCE(ADEFCHP,VALUE( 166))
TYPE INTEGER ADEFCHP
EQUIVALENCE(MAINT,VALUE( 167))
TYPE INTEGER MAINT
EQUIVALENCE(AZON1,VALUE( 168))
TYPE INTEGER AZON1
EQUIVALENCE(AZON2,VALUE( 169))
TYPE INTEGER AZON2
EQUIVALENCE(AZON3,VALUE( 170))
TYPE INTEGER AZON3
EQUIVALENCE(CPACTY,VALUE( 171))
TYPE INTEGER CPACTY
EQUIVALENCE(ICORP,VALUE( 172))
TYPE INTEGER ICORP
EQUIVALENCE(IPIRV,VALUE( 173))
TYPE INTEGER IPIRV
EQUIVALENCE(IIDL,VALUE( 174))
TYPE INTEGER IIDL
EQUIVALENCE(PKNAV,VALUE( 175))
TYPE REAL PKNAV
EQUIVALENCE(ITIME,VALUE( 176))
TYPE INTEGER ITIME
EQUIVALENCE(PSASW,VALUE( 177))
TYPE REAL PSASW
EQUIVALENCE(TPASW,VALUE( 178))
TYPE REAL TPASW
EQUIVALENCE(TGISTAT,VALUE( 179))
TYPE INTEGER TGISTAT
EQUIVALENCE(FLAG,VALUE( 180))
TYPE INTEGER FLAG
EQUIVALENCE(NOPERS01,VALUE( 181))
TYPE INTEGER NOPERS01
EQUIVALENCE(NOPERS02,VALUE( 182))
TYPE INTEGER NOPERS02
EQUIVALENCE(NOPERS03,VALUE( 183))
TYPE INTEGER NOPERS03
EQUIVALENCE(NUMOHL,VALUE( 184))
TYPE INTEGER NUMOHL

```

```

EQUIVALENCE(EFECNES1,VALUF ( 185))
TYPE KFAL EFECNES1
EQUIVALENCE(EFECNES2,VALUF ( 186))
TYPE KFAL EFECNES2
EQUIVALENCE(VAL1 ,VALUE ( 187))
TYPE KFAL VAL1
EQUIVALENCE(VAL2 ,VALUE ( 188))
TYPE KFAL VAL2
EQUIVALENCE(TYPE1 ,VALUE ( 189))
TYPE INTEGER TYPE1
EQUIVALENCE(TYPE2 ,VALUE ( 190))
TYPE INTEGER TYPE2
CALL INITIND
CALL READIN
KEY(6) = KEYMAKE(2,34,14)
KEY(7) = KEYMAKE(2,22,12)
KEY(8) = KEYMAKE(1,11,11)
KEY(9) = KEYMAKE(1,0,11)
KTAP = KEYMAKE(2,0,15)
KZON(1) = KEYMAKE(2,15,6)
KZON(2) = KEYMAKE(2,21,6)
KZON(3) = KEYMAKE(2,27,6)
KEYC1 = KEYMAKE(3,0,18)
KEYC2 = KEYMAKE(2,14,12)
CALL ALOCPIR
MYIDENT = 7*MINDEXR
NPRINT=1
CALL INITAPE
NPRINT=0
ICKS=23
NOUT=1
JOUT=2
ITOUT(1)=2
NPRINT=1
MYIDENT = 8*NOTARASE
CALL READPIR(1)
MYIDENT = 7*SCATCH
CALL WRITEPIR( ITOUT(1))
DO 7290 I = 1, IDEF
  VALUF(I) = IDEF*VAL(I)
7290 LGLOW(I) = 0
NPRINT=0
C*****PASS 1 *****
INTP = 1
CALL INPIITEM
PRINT 4002, ICLASS,TSITE,ISIDE
90 CONTINUE
IF( ICLASS.NE. 0) NAMCLAS(ICLASS) = CLASS
C ASSIGN JTYPE=COUNT ITEMS BY CLASS AND TYPE
IF( (ICLASS.NE.1).OR.(TSITE.FO.1))100,94
98 JSITE=JSITE+1
IF(NOTRESPONDED.AND.SITE) 100,95
95 CONTINUE
CHANGE TSITE
NC= 114
CALL CHANGE

```

30000
31000
32000
33000
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66000
67000
68000
69000
70000
71000

```

ISITE=JSITE
GO TO 50
100 IF(ICLASS.EQ.0)120,101
101 IF(SITE.EQ.4)102,103
102 IF(ICKFLG(ICLASS).EQ.0)110,111
110 IS=1
IR=MTARPCI
GO TO 104
103 NTIND=ICLASS+MTARCLS
IF(ICKFLG(NTIND).NE.0) GO TO 113
112 IS=MTARPCI+1
IP=MTARPCI+2
104 DO 110 I=1A,I=
NTN = TYPENAM(I,ICLASS)
IF(NTN.EQ.0) GO TO 111
IF(NTN.EQ. TYPE ) GO TO 112
110 CONTINUE
IF(1A.F0.1) 114,115
114 ICKFLG(ICLASS)=4*PLUE
111 ICKNUM(ICLASS)=ICKNUM(ICLASS)+1
GO TO 119
115 NTIND=ICLASS+MTARCLS
ICKFLG(NTIND)=3*HRED
113 ICKNUM(NTIND) = ICKNUM(NTIND) + 1
GO TO 119
111 TYPENAM(I,ICLASS)=TYPE
112 CONTINUE
CHANGE JTTYPE
NC= 57
CALL CHANGE
JTYPE=1
NADD=1
IF(ICLASS.EQ.1)113,114
113 NADD = NOPERSO/ NMPSTE
JSITE=1
114 TYPEPL(I,ICLASS)=TYPEPL(I,ICLASS)+NADD
119 CONTINUE
C SAVE ALL VALUES OF VULN
C*****ASSIGN IVULN
IF(IVULN.GT.NVULN) GO TO 135
136 CONTINUE
DO 116 I = 1,NVULN
IF(CVULN(I).EQ.0)118,115
115 IF(CVULN(I).EQ.VULN)119,116
116 CONTINUE
135 NCKFLG(2)=NVULNS
NVULN = NVULN+1
NCKNUM(2)=NVULN
GO TO 120
118 CVULN(I)=VULN
NVULN=1
119 CONTINUE
119 INSAVE=1
50 CONTINUE
CHANGE IVULN
NC= 115

```

72000
73000
74000
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81000
82000
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85000
86000
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88000
89000
90000
91000
92000
93000
94000
95000
96000
97000
98000
99000

100000
101000
102000
103000
104000
105000
106000
107000
108000
109000
110000
111000
112000
113000
114000
115000
116000
117000
118000
119000
120000
121000
122000
123000
124000

11/26/71

```

CALL CHANGE
IUDEN=IUSAVE
120 CONTINUE
CALL CUTITEM
CALL PEXITW
GO TO (90,91),ISWTRM
C *****
C END PASS 1 *****
C MAKE UP TABLES=HREAR=POINT,CUM,NO. OF TYPES, NO. OF BLUE TYPES
91 NULL = 0
IND=1 $ L=1 $ J=1
DO 140 I=1,MTARCLS
IA=1
IR=MTARPC
121 DO 130 K=IA,IR
KTON=K
NCHKNUM(I)=NCHKNUM(I)+1
IF (NCHKNUM(I).GT.MTARTYP) K20=R21
R20 NCHKFLG(I)=SHTYPES
L=MTARTYP
821 CONTINUE
INDREG(L)=IND
TR=TYPEHL(K,I)
IF (TR.EQ.0) 122,124
122 IF (J.FQ.1) 123,124
123 BTYPE(I) = KTON - IA
J=2
IA= MTARPC + 1
IR= MTARPC * 2
GO TO 121
124 IF (I.FQ.1) 125,126
125 CM=0 $ GO TO 127
126 CM=CUMNO(I-1)
127 CUMNO(I) = BTYPE(I) + KTON - IA + CM
J=1 $ GO TO 140
128 IND=IR,INDREG(L)
TYPEHL(K,I)=L
L=L+1
IF (K.AF.MTARPC) GO TO 1339
1338 KTON=21
GO TO 123
1339 IF (K.NE.(2*MTARPC)) GO TO 130
1337 KTON = 2 * MTARPC + 1
GO TO 124
130 CONTINUE
140 CONTINUE
LMAX=L
NEWCON = MTARCLS * (MTARPC * 2)
DO 150 I=1,NEWCON
L=TYPEHL(I)
IF (L.EQ.0) 150,145
145 TYPENAM(L) = TYPENAM(I)
150 CONTINUE
TYPENAM(LMAX) = 'IM
DO 152 L=1,MTARCLS
NTIND = 1 + CUMNO(L-1)
INDCLAS(L) = INDREG(NTIND)

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152 CONTINUE
  IF (IPRINT(1)) 1149,1165
1149 CONTINUE
  PRINT 1150
  DO 1151 L=1,LMAX
1151 PRINT 1152,L, TYPENAM(L),INDREG(L)
  PRINT 1161
  DO 1162 L=1,MTARCLS
1162 PRINT 1163,CUMNO(L),HTYPES(L),INDCLAS(L)
1165 CONTINUE
  CALL WRSIMT(1)
  C   COMPUTE DISTANCES FOR COLOCATION
    S=1./60.
    IF (NVULN .LE. NVULN) GO TO 5702
5701 NVULN = NVULN
5702 CONTINUE
    NCHKNUM(2) = NVULN
    DO 155 I=1,NVULN
      CROST(I) = S * VLRAID(1., CVULN(I),0.,FN )
155 CONTINUE
    IF (IPRINT(4)) 156,158
156 PRINT 157,(I,CVULN(I),I=1,NVULN)
158 CONTINUE
    CALL WRSIMT(2)
    DO 240 I=1,MTARSEC
      IND(I)=0
240 CONTINUE
      X(I)=0 $ Y(I)=0 $ Z(I)=0
      LENGTH=0
      NITEM=0
      DO 241 I=1,10
241 NR(I)=0
      MYIDENT = THSCATCH
      ITP=4
      CALL SETMIT
      NCUT=1
      JOUT=3
      ITOUT(I)=3
      MYIDENT = BHSCATCH
      CALL HEADUP(2)
      MYIDENT = BHSCATCH
      CALL WRITEDP(ITOUT(I))
      DO 7291 I=1, IDEF
7291 LGLOH(I) = IDEF
      VALUE(I) = IDEF
      LMAX = CUMNO(MTARCLS)
      DO 250 L=1,LMAX
250 INDCLAS(L)=INDREG(L)
      INTP = 2
      CALL TAPITEM
      C   PASS 2 *****
200 CONTINUE
      C   IF (CLASS.EQ.0) 215,201
      C   ASSIGN INDEXNO
201 IF (ISITE.GT.1) 210,203
203 L=TYPE9L(JTYPE,ICLASS)

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```

INDEX=INOCUR(L)
CHANGE INOEXNO
NC= 22
CALL CHANGE
INDEXNO=INDEX
CHANGE ITYPE
NC= 50
CALL CHANGE
JTYPE=L
NADD=1
IF(ICLASS.EQ.1)204,205
204 NADD = NOPERSON/NRPSITE
205 INOCUR(L)=INDEX+NADD
GO TO 212
210 IND=INDX+ISITE-1
CHANGE INOEXNO
NC= 22
CALL CHANGE
INDEXNO=IND
212 CONTINUE
C SAVE INDEXNO,LAT,LONG,DISTANCE FOR COLOCATION
COIST=COIST(IIVULN)
C *** IF XLONG TABLE DATA SET TO MORE THAN 6 VALUES CHG LOOP
DO 260 I=1,6
IF(LONG.LF.XLONG(I))261,260
260 CONTINUE
I=1
261 NR(I)=NR(I)+1
GO TO (264,266)I
264 IF(NR(I).GT.MI-RSEC) GO TO 215
2264 INR(I)=INDEXNO
NR(2)=LONG
NR(3)=LAT
NR(4)=COIST
ITP=6
CALL XARRAY(I,P,4)
LNGTH=LENGTH+1
GO TO 215
266 NITF=NITF+1
IF(NITER.GT.MI-RSEC) GO TO 215
267 IND(NITF)=INOCUR(L)
X(NITF)=LONG
Y(NITF)=LAT
Z(NITF)=COIST
215 CONTINUE
CALL OUTITEM
CALL NEXTIM
GO TO (200,230)ISITER4
C END PASS 2 *****
C MAKE UP COLOCATION ISLANDS AND COMPLEX TARGETS
230 CONTINUE
ITP=6
CALL TEMPLAP
ITP=2
MYDIFF = MSC-ATCH

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CALL SFTWRT
NCOL=0
NLSL=0
DO 233 I=1,6
  IF (NLSL(I).LE.MTARSEC) GO TO 233
231 PRINT 232,I,NLSL(I)
  NLSL(I) = MTARSEC
  NITEM = XMINOF(NITEM, MTARSEC)
233 CONTINUE
  IF (IPHAT(4)) 1000,235
1000 PRINT 1010
235 CONTINUE
CALL COLLOCAT
LINEA 5 LOUT=7
C *** IF XLONG TABLE DATA SIT TO MORE THAN 4 VALUES CHG LOOP
DO 520 LPPSS=2,6
  I=0
  TLONG=XLONG(LPASS)
  MYINENT = THSCATCH
  ITPELIN 5 CALL SFTREAD
  ITP = LOUT
  MYINENT = THSCATCH
  CALL SFTWRT
  INDEKPHI 24SEPT1 *****
  DO 510 I1=1,LENGTH
    ITPELIN
    CALL XNARWAY(I1,4)
    IF (NLSL(2).LE.(TLONG)500,505
505 ITPELOUT
    CALL XNARWAY(I1,4)
    GO TO 510
508 I=I+1
    INSL(I)=ITP(I)
    X(I)=NLSL(2)
    Y(I)=NLSL(3)
    Z(I)=NLSL(4)
510 CONTINUE
  NITP=NLSL(LPASS)
  LENGTH=LENGTH-ITP
  ITPELIN 5 CALL TERMTAP
  ITP = LIT
  CALL TERMTAP
  ITP = LOUT
  CALL TERMTAP
  JXELIN
  LTNELOUT
  LOUT=JX
  CALL COLLOCAT
520 CONTINUE
  ITP=7
  CALL TERMTAP
  IF (NLSL(4).LE. MTARCOL) GO TO 523
521 NCHAFLG(12)=NLSL(12)
  NCHAFLG(12)=NLSL
523 CONTINUE
  C END COLLOCAT*****

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IF (IPRINT(4) .EQ. IPRINT(7) .OR. IPRINT(8) .EQ. IPRINT(11) .275 .278
275 NTCUR=1
PRINT 276,NISL,NCOL,N,YSTONE
278 CONTINUE
DO 304 I=1,MIA:TPD
309 ICWK(I)=0
NTOEF=0
DO 310 I=1,MIA:TEI
310 ITERM(I)=MINI(I)=0
NASKTEU
NWD=0
NREFPLD=0
NMLUPLD=0
NZONFS=0
DO 312 I=1,MIA:IND
312 STATUS(I)=0
ZON = KEY-AKF(2,42,6)
TVULN = KEY-AKF(2,15,6)
TSTAT = KEY-AKF(2,0,3)
TCOL = KEY-AKF(2,3,3)
TAROLD = KEY-AKF(2,6,3)
TARDHI = KEY-AKF(2,9,3)
KATTACK = KEY-AKF(2,12,3)
KARDEF = KEY-AKF(2,21,3)
KTERM = KEY-AKF(2,24,9)
KDEFZON = KEY-AKF(2,33,6)
KDEFCDP = KEY-AKF(2,39,3)
NIND = 1 + CUMNO(MTARCLS)
MAXIND = INDRS(NIND) - 1
NOUT=1
ITOUT(I)=4
JOUT=4
MYIDENT = 8MSCATCH
NOPRINT = 1
CALL HEADIR(3)
MYIDENT = 8HURINDEX
CALL PRITFDR(ITOUT(I))
DO 7292 I = 1, IDEF
VALUE(I) = IDEFULT(I)
7292 LGLOH(I) = 0
IF (IPRINT(3)) 314,315
314 CALL PRINDHC
315 CONTINUE
INTP = 3
CALL IMPITEM
NZONERR = 0
ITP = 10
MYIDENT = 8MSCATCH
CALL SETWRIT
PASS 3 GET TYPE DATA,FILL STATUS *****
C
320 CONTINUE
IF (ICLASS.EQ.01335,325
325 IF (ICLASS.EQ. 7HWARHEAD) 330,326
326 IF (ICLASS.EQ.3HASM) 329,327
327 IF (ICLASS.EQ.4HZONE) 328,331
331 IF (ICLASS.EQ. 7HPAYLOAD ) 332, 321

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321 IF (CLASS.EQ.7)NRDATA) GO TO 322
 IF (CLASS.EQ.8)NRDATA) GO TO 380
 IF (TYPE.EQ.5)NRDATA) GO TO 380
 IF (TYPE.EQ.6)NRDATA) GO TO 380
 IF (TYPE.EQ.7)NRDATA) GO TO 380

TIME DEPENDENT DML DATA TABLES

322 IDLMAX = MAXOF (IDLMAX, IDRL)
 TMAX (TIME, IDL) = TMAX
 DRLAS (TIME, IDL) = PSAS

GO TO 340

332 IF (SIDE.EQ.4)NRVALUE) 301,302

301 ISIDE=1

NRLOPLD=NRLOPLD+1

IF (NRLOPLD.LE.4)NRLOPLD) GO TO 901

900 NCHKFLG(8)=8)NRLOPLD

NCHKNUM(8)=NRLOPLD

GO TO 304

901 CONTINUE

KNARRAY (PAYLOAD)=NRLOPLD

CHANGE PAYLOAD

NC= 78

CALL CHANGE

PAYLOAD=NRLOPLD

GO TO 304

302 ISIDE=2

NRLOPLD=NRLOPLD+1

IF (NRLOPLD.LE.4)NRLOPLD) GO TO 911

910 NCHKFLG(9)=9)NRLOPLD

NCHKNUM(9)=NRLOPLD

GO TO 304

911 CONTINUE

KNARRAY (PAYLOAD)=NRLOPLD

CHANGE PAYLOAD

NC= 78

CALL CHANGE

PAYLOAD=NRLOPLD

IF (NRLOPLD.EQ.0) 334,333

334 MIRV (PAYLOAD, ISIDE)=1

341 IF (NRLOPLD.EQ.0) 338,339

338 INWDS (PAYLOAD, ISIDE)=1

GO TO 340

333 MIRV (PAYLOAD, ISIDE)=NRLOPLD

GO TO 341

339 INWDS (PAYLOAD, ISIDE)=NRLOPLD

340 INWDS (PAYLOAD, ISIDE)=NRLOPLD

INREC (PAYLOAD, ISIDE)=NRLOPLD

INREC (PAYLOAD, ISIDE)=NRLOPLD

GO TO 340

328 NRZONES=MAXOF (NRZONES, NRZONES)

IF (NRZONES.GT. NRZONES) GO TO 850

851 ZONES (ZONE,1)=AREA

GO TO 340

850 NCHKFLG(7)=5)NRZONES

NCHKNUM(7)=NRZONES

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GO TO 340
AS=TYPE DATA
329 NASV=NASVT+1
IF(NASVT-GL.NASHTYP) GO TO 870
871 ASVT(AS+TYPE,1)=PLANT
ASVT(AS+TYPE,2)=CFP
GO TO 340
870 NCHKFLG(4)=MASWS
NCHKVIM(5)=NASVT
GO TO 340
C
WHEAD TYPE DATA
WHD=MAXOF(NHDC,WHOTYPE)
330 IF(WHHD-GL.WHDTRE) GO TO 860
861 WHD(WHDTYPE,1)=PRUN
WHD(WHDTYPE,2)=YIELD
WHD(WHDTYPE,3)=CEP
GO TO 340
860 NCHKFLG(6)=WHHARHEADS
NCHKNUM(6)=WHHD
GO TO 340
C
ALL INDEXED ITEMS HERE
335 IF(INDEXNO-LE.MTARTF) GO TO 801
800 NCHKFLG(3)=RMINDEXNO
NCHKNUM(3)=MAXOF(NCHKNUM(3),INDEXNO)
GO TO 340
801 CONTINUE
336 CONTINUE
CALL IPUT(TCOL,INDEXNO,1,STATUS)
IF(ICOMP(INDEXNO).EQ.0) 343,337
337 CONTINUE
CHANGE ICOMPLEX
NC= 55
CALL CHANGE
ICOMPLX = ICPL(INDEXNO,ISTORE)
343 CONTINUE
CALL IPUT(TAM,1,INDEXNO,TARDEF,STATUS)
CALL IPUT(TATTACK,INDEXNO,TATTACK,STATUS)
CALL IPUT(TVUL,INDEXNO,TVULN,STATUS)
CALL IPUT(KUEFZON,INDEXNO,AREFZON,STATUS)
CALL IPUT(KUEFCMP,INDEXNO,ADFFCMP,STATUS)
IF(ADFFZON-GE.1) IAREA = 0
IF(ADFFZON-GE.1) IAREA = 1
CALL IPUT(KARDEF,INDEXNO,IAREA,STATUS)
IF(INIT,GT.0) 531,530
530 LTEMP(INDEXNO)=0
GO TO 532
531 NTOEF=NTOFF+1
IF(NTOEF-LE.MTARTF) GO TO 831
830 NCHKFLG(4)=NTERMOEFS
NCHKNUM(4)=NTOEF
GO TO 532
831 LTEMP(INDEXNO)=1
ITEM(NTOEF)=INDEXNO
NTINTX(NTREF)=NTINT

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532 CONTINUE
   IF (IGISTAT.EQ. 1) GO TO 345
   IF (ICLASS.EQ. 14) GO TO 345
   IF (ICLASS.GT. 5) GO TO 340
345 CONTINUE
   CALL IPUT(ISTAT,INDEXNO,STATUS)
   IF (ICLASS.EQ. 14) GO TO 351
   IF (ICLASS.GT. 5) GO TO 340
   IF (ICLASS.LT. 4) 360,347
347 CONTINUE
   IF (ZONEF.GT. 0) GO TO 3447
   ITP = 10
   ITWORD = SIDE
   CALL WORD
   ITWORD = ICLASS
   CALL WORD
   ITWORD = TYPE
   CALL WORD
   ITWORD = INDEXNO
   CALL WORD
   ITWORD = DESIG
   CALL WORD
   TWORD = LAT
   CALL WORD
   TWORD = LONG
   CALL WORD
   ITWORD = NAME
   CALL WORD
   NZONFR = NZONFR + 1
347 CONTINUE
   CALL IPUT(ZONE,INDEXNO,ZONE,STATUS)
   LC = 2
   IF (ICLASS.EQ. 4) 340,348
348 LC=3
349 ZONE(ZONE*LC) = ZONE(ZONE*LC) * EFFECTIVES
   IF (ICHECK(TYPE)) 340,350
350 LC=LC-1
   LR=ITYPP-CUMNO(ICLASS-1)
   CAPACTY(LR,LC) = EFFECTIVES
   ICHK(TYPE)=1
   GO TO 340
C AREA BALLISTIC MISSILE OFFENSE COMPONENTS HERE
C IGWORD IF NO AREA WORD ZONE UNFINED
351 IF (AREFZON.LT. 0) GO TO 340
   ICOMP = AREFCMP + 1
C DEFINE IF A MISSILE SITE OR A LONG RANGE MADAM
C GO TO (340, 352, 352, 352, 353), ICOMP
   ARE HASSES HERE
352 ATNT(AREFZON,AREFCMP)=MAINT
   GO TO 340
C LONG RANGE MADAMS HERE
353 IF (AZON1.EQ. 355,354
354 NLPR(AZON1)=NLPR(AZON1)+1
355 IF (AZON2.EQ. 0) 357,356
356 NLPR(AZON2)=NLPR(AZON2)+1
357 IF (AZON3.EQ. 0) 359,348

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358 MI-PR(AZONR)=ML-PR(AZONR)+1
359 CALL IPUT(KTAR,ADEFZON,INDEKNO,IOWERLP)
CALL IPUT(KZON(1),ADEEZON,AZON1,IOWERLP)
CALL IPUT(KZON(2),ADEEZON,AZON2,IOWERLP)
CALL IPUT(KZON(3),ADEEZON,AZON3,IOWERLP)
GO TO 340
C MISSILES AND SUMREWS HERE
360 IF(ITYPE.EQ.0) 360,600
600 IF(PAYLOAD.EQ.0) 361,601
601 CONTINUE
CHANGE PAYLOAD
AC= 78
CALL CHANGE
PAYLOAD=KARNEY(PAYLOAD)
361 IF(ICR(ITYPE)) 362,362
362 ICR(ITYPE)=1
IF(ICLASS=2) 365,376,375
C MISSILE TYPE DATA
365 FMIS(ITYPE,1)=PINC
FMIS(ITYPE,2)=PLANT
FMIS(ITYPE,3)=JUES
FMIS(ITYPE,4)=DPHF
FMIS(ITYPE,5)=TVUI
FMIS(ITYPE,6)=DETAGG
FMIS(ITYPE,7)=MEP
FMIS(ITYPE,8)=CEP
FMIS(ITYPE,9)=PKMTS
FMIS(ITYPE,10)=DELTA
FMIS(ITYPE,11)=FUNCTION
GO TO 340
C ROCKET TYPE DATA
370 LE=TYPE-CUMNO(1)
ROM(L,1)=PLANT
ROM(L,2)=TMDL
ROM(L,3)=RRATE
ROM(L,4)=DPART
ROM(L,5)=CEP
ROM(L,6)=DELTA
IPUR(L,7)=FUNCTION
IF(PKMTS.GT.0) MRRMHPV = 1
GO TO 340
C TANKER TYPE DATA
375 LE=TYPE-CUMNO(2)
TANK(L,1)=PLANT
TANK(L,2)=TMDL
TANK(L,3)=RRATE
TANK(L,4)=DELTA
TANK(L,5)=FUNCTION
GO TO 340
380 CALL OUTITEM
377 IF(OUTITEM.EQ.0) 378,377
378 CONTINUE
CALL EXITTM
GO TO (200,300) ISPTERM
END PASS 3 *****
C 390 CONTINUE

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IFIPRNT(10) = 0
ITP = 10
IT*OPR = RHEMIZONER
DO 3448 I = 1, 8
3448 CALL W*W*O*O
ITP = 10
CALL TERM*AP
ARRAY COLAR WILL BE READ INTO COMPLEX
IF (NCH*FLG(12)) 016,915
915 CONTINUE
MYIND*F = RNSCRATCH
ITP=2
CALL SET*HEAD
CALL RDR*H*AY(COLAR,COL)
CALL W*SI*MT(13)
ITP=2
CALL TERM*AP
ISTOP*F=C*OL
CALL TO*FF*ST
916 CALL W*SI*MT(4)
ITP=4
JJITP=4
7775 CONTINUE
MYIND*F = RH*H*INDEX
CALL SET*HEAD
CALL SKIP*FILE (JJITP)
7774 HUFF*OUT(JJITP,1) (CUM*NO,TYPE*NAME(25))
CALL W*PR*NT
CALL AC*RO*V*EL
IF (M*KN*U*MY .NE. 0) GO TO 991
PR*NT 990
990 FORM*AT(1X,50H*U*MY C*OR*ID*OR FOR TACTICAL AIR NOT DEFINED
1 /, 1X,100(1*#), //)
991 IF (M*KN*V*AIR .EG. M*KN*P*P*P* ) GO TO 995
IF (M*KN*V*AIR .NE. 0) GO TO 995
PR*NT 992
992 FORM*AT(1X,60H*NAVAL AIR C*OR*ID*OR NOT DEFINED..*BASE MUST BE CORRE
ICTED
//,1X,100(1*#), //)
995 CONTINUE
470 IF(UNIT,JJITP) 470,471
471 END FILE JJITP
R*F*IND JJITP
WR*TE(46,7777)
157 FORM*AT(1M1,10X,10H IVULN,5X,10H VULN,//,(11X,110,7X,A8))
232 FORM*AT(1M1,10X,110H *MANY ITEMS FOR COLLOCATION,10X,3*H*P*(.12,2*H)=,16)
276 FORM*AT(18,2X,17H*CO*LOCATED ISLANDS //
* 1M,2X,17H*CO*LOCATED TARGETS //
* 1R,2X,15H*COM*PLEX TARGETS //
* 1R,2X,21H*E*LEMENTS OF COMPLEXES //)
1010 FORM*AT(10M1 IN*NO,3X,3*H*IN*TA,3X,5*H*IN*LA,3X,6*H*ID*LONG,12X,5*H*COLAR/)
1150 FORM*AT(1M1,15X,*P*LAN*E*TYPE*,*AX,*P*Y*E*NAME*,*AX,*IN*DE*G*,//)
1161 FORM*AT(8M1 CUM*NO,8H *T*Y*P*E*,8H IN*DO*CLAS//)
1152 FORM*AT(20X,14,8X,A8,I10)
1163 FORM*AT(3IR)
6602 FORM*AT(1X, * H*EN*CH PR*NT 1 * ,21R,2X, A8)
7777 FORM*AT(1M1 ***** PR*O*CESSOR IN*DE*X* COM*P*LETED *****

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FTNS.S

END

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304000

INDEXER

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

INDEXER	04077
DIRECTRY	00330
AREARAT	11654
ITP	00144
KEY	00012
KEYC	00004
KEYS	00014
MAX	00050
MYIDENT	00001
NAVALTH	00312
NOPRINT	00001
PADATA	00050
PRNT	00017
SETAPE	00004
TRANS	00004
TWORK	00001
WRIT	00030
1	37204
2	00764
3	10006
4	11616
5	02001
7	01356
9	00144
10	00120
COMMON	00003
PROCESS	01173
EDITERR	00001
EDITAPE	00015

EXTERNAL SYMBOLS

ORGEENTRY	03010040
THEND.	01002100
01003100	01010100
03000040	ORODICT.
INITIND	REACTIN
KEYMAKE	ALUCDIR
INITAPE	HEADDIR
WRITERR	INPTERR
CHANGE	QUITEM
NEATIM	WPSINT
VLRADI	SETWRIT

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WRAPRAY
TEMPTAP
COLUCAT
SETREAD
ROADWAY
PRATORC
IPUT
ICPL
WRWHD
PRIFFW
TDEFSTT
SKIPFILF
WRPHYT
AROPFL
XWINDF
XWAXOF
QAGIFUNI
EFT.
HEW.
STH.
HFO.
QMSINGL.

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C00312	ARRATE	03316	03316	03346	03346				
C00334	ADRLI								
C00340	ADHL4								
C00414	ADFFCMP	02711	03145	03750	03750				
C00413	ADFFZON	02704	02713	02720	02720				
		03761	03761						
C00363	NGX								
C00364	RGY								
C00367	AMOM								
C00000	ATNT	03156	03156						
C00300	ALERTONI								
C00302	ALERTOLY								
X00014	ALOCNTH	00426							
C00203	AREA	02537	02537						
X00044	AMOVDFL	03500							
C07172	ASMT	02546	02547	02540	02561				
C00241	AS:TYPE	02546							
C00004	ATTNAME								
C00321	ATTNCOMP								
C00320	ATTNLEF								
C00325	ATTNSUPF								
C00416	AZONI	03160	03160	03163	03163				
C00417	AZON2	03166	03166	03171	03171				
C00420	AZON3	03174	03174	03177	03177				
C00361	MCORF								
C00161	MEND	03472							
X00053	WFO.								
C00210	WLEF-00	03313	03313	03315	03315				
C004602	WOM	03325	01027	01052	01052				
		03135	03135						
C00020	WTYPE5								
C10031	CAPACTY								
C00166	CATCODE								
C00304	CCREL	01536	01574	01624	01624				
P00032	CNIST	02557	02560	02603	02604				
C00267	CFP	00543	00552	00740	01467				
X00021	CHANGE								
C00175	CL	00524	00524	02336	02336				
C00147	CLASS	02352	02356	02356					
C00377	CLASS1								
C00372	CLT	01042	01050	01042					
P00033	CM								
C00153	CNTDVIAC								
C00152	CNTDYNOW								
C00401	CNTVLOC1								
C00400	CNTVLOC2								
P04552	CNTVLOC3								
C00360	CODE	00514	00515	00517	01211				
C00000	COL	01071	01073	02077	02100				
C00002	COLAR								
C00000	COLO	03431							
X00031	COLLOCAT	02627							
		01720	02037						

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C00424	IOBL	02377	03662	03662					
C00311	IOBLMAX	02377	02400	02400					
C00000	IOEF	00467	00467	01417	01417	02277	02277		
C02740	IOEFALT								
C02740	IOEFAULT	00473	00473	01423	01423	02303	02303		
C00007	IOFLAT								
C00010	IOFLONG								
C00362	IOJUC								
P00531	IF00001.								
P02063	IF00002.								
P02065	IF00003.								
C00770	IFORMAT								
C00000	IFTPRNT	03373	03374						
C00216	IGIW								
P04043	IGOTO.	00754	01557	01635	03147	03371			
C00234	IGROUP								
P04044	II	01753	02011						
C00423	IMIRV								
P03553	IN00004.	00606	00646	00671	03577	03610	03645		
P03554	IN00005.	01014	01075	03600	03612	03614	03624		
P03555	IN00011.	01460	03634	03646					
P03556	IN00015.	02402	03656	03667					
P03557	IN00017.	02500	02510	03677	03714				
P03560	IN00020.	02505	02514	02517	03701	03712			
P03561	IN00021.	02522	03700	03711					
P03562	IN00027.	03114	03724	03735					
P03563	IN00031.	03134	03734	03744					
P03564	IN00032.	03155	03755	03765					
C11457	INARDEC	02525	02525						
C27344	IND	00760	00760	01011	01011	01074	01074	01345	01346
		01532	01617	02002	02002	01167	01167	01214	01442
C00056	INDREG	01013	01013	01072	01072	01167	01167	01442	01442
C00037	INDCLAS	01170	01242						
C05210	INDCUR	01443	01463	01464	01520	01520			
C11337	INDECYS	02523	02523						
P04045	INDEX	01465	01472	01516	01522				
P00330	INDEXER	00330							
C00174	INDEXNO	01473	01473	01533	01533	01566	01566	01615	01615
		02625	02625	02634	02637	02653	02653	02671	02671
		02710	02727	02735	02736	02755	02756	03001	03001
		03205							
C00005	INDNO								
C00346	INDV								
X00015	INITAPE	00435							
C00003	INITEM								
X00011	INITIND	00336							
X00020	INPITEM	C0504	01447	02320					
C00347	INTAR								
C00000	INTP	00503	00503	01445	02316	02317			
C11173	INM40S	02504	02504	02515	02515				
C00233	IOIWER								
C00120	IOVERLP	03205	03212	03217	03224				
C00402	IPENMODE								
C00212	IPPOINT								

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		02065	02311	02311	03357	03357					
X00035	IPUT	02632	02655	02662	02667	02674	02701	02706	02777	03076	03202
		03207	03214	03221							
C00403	IRECMODE										
C00232	IREFUEL										
C00231	IREG										
		03273	03274								
P04046	ISIDE	00516	02413	02445	03705						
C00330	ISITE	00515	00531	00531	00547	00547	01455	01455	01523		
C00001	ISTORE	02103	02103	02653	03444	03444					
C00000	ISWTERM	00753	00753	01634	01634	03370	03370				
C00662	ITANK	03353	03353								
C00001	ITERM	02132	02762								
C00234	ITGT										
C00426	ITLME	03652	03652								
C00310	ITMAX										
C00092	ITOUT										
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		01367	01370	01576	01577	01637	01640	02027	02044	02045	02325
		01754	01755	01767	01767	02022	02022	03412	03423	03437	03454
		02325	03022	03023	03375	03375	03411	03422			
		03455									
		03024	03025	03032	03032	03037	03037	03044	03051	03051	03070
		03070	03377	03377	03377						
		01501	01501	03120	03120	03126	03124	03136	03227	03227	03246
		03246	03251	03252	03260	03306	03306	03336	03336		
C00374	ITYPFT	00735	00743								
P04047	IUSAVE	00744	00744	01534	01534	02677					
C00331	IVULN	02520	02520								
C11027	IWHOTYP	01567	01567	01602	01760	01772	02000	02000			
C00000	IWS										
C00326	IWYP2										
P00551	IWJ	00530	00533	00540							
P00524	IWJ										
P00527	IWJ	00523									
P00574	IWJ	00571									
P00575	IWJ	00611									
P00612	IWJ	00615									
P00613	IWJ	00617									
P00614	IWJ	00615									
P00617	IWJ										
P00700	IWJ										
P00701	IWJ	00677	00677								
P01103	IWJ										
P01104	IWJ	01102									
P01112	IWJ	01102									
P01113	IWJ	01111									
P01261	IWJ	01240									
P01262	IWJ	01260									
P01565	IWJ	01504	01504								
P01566	IWJ	01564	01564								
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P01663	IWJ	01662	01662								

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P02554	.100039	02575
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P03022	.100062	03142
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P03145	.100064	03143
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P02131 .310		
P02152 .312		
P02313 .314	02312	
P02316 .315	02312	
P02333 .320	03372	
P02352 .321	02351	
P02375 .322	02355	
P02336 .325	02334	02335
P02341 .326	02340	
P02344 .327	02343	
P02527 .328	02346	
P02547 .329	02343	
P02567 .330	02340	
P02347 .331	02346	
P02407 .332	02351	
P02507 .333	02476	
P02477 .334		
P02613 .335	02335	
P02632 .336	02630	
P02644 .337	02642	
P02504 .338		
P02513 .339	02503	
P02516 .340	02506	
P02502 .341	02512	
P02655 .343	02631	02643
P03076 .3447	03021	
P03403 .3448		
P02777 .345	02767	02772
P03016 .347	03014	03015
P03111 .348	03107	
P03114 .349	03110	
P03123 .350		
P03141 .351	03006	03152 03152
P03154 .352	03151	
P03160 .353	03153	
P03163 .354	03161	
P03166 .355	03162	
P03171 .356	03167	
P03174 .357	03170	
P03177 .358	03175	
P03202 .359	03176	
P03227 .360	03015	
P03244 .361	03234	
P03251 .362		
P03257 .365	03255	
P03306 .370	03255	

P02462	.911	02454
P03420	.915	
P03450	.916	03417
P00541	.95	00537
P00534	.98	00532
P03514	.991	03505
P03530	.995	
P03771	ERASER.	
P00011	..100000	00431
P00012	..100001	00450
P00013	..100002	00456
P00014	..100003	00555
P00015	..100004	00625
P00016	..100005	00637
P00017	..100006	00721
P00020	..100007	01005
P00021	..100008	01153
P00022	..100009	01364
P00023	..100010	01400
P00024	..100011	01406
P00025	..100012	01645
P00026	..100013	01734
P00027	..100014	01745
P00030	..100015	02055
P00031	..100016	02256
P00032	..100017	02266
P00033	..100018	02326
P00034	..100019	02337
P00035	..100020	02342
P00036	..100021	02345
P00037	..100022	02350
P00040	..100023	02353
P00041	..100024	02357
P00042	..100025	02363
P00043	..100026	02370
P00044	..100027	02410
P00045	..100028	02423
P00046	..100029	02455
P00047	..100030	02542
P00050	..100031	02562
P00051	..100032	02606
P00052	..100033	02617
P00053	..100034	02750
P00054	..100035	03376
P00055	..100036	03420
P00056	..100037	03457
P00222	..1010	01715
P00244	..1150	01177
P00274	..1152	01207
P00263	..1161	01225
P00303	..1163	01235
P00124	..1157	01313
P00147	..232	01667
P00165	..276	02075

03521 01111 01133 01135

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C00567	LTER	02760					
C00000	VARDEFZ						
C00047	VARDEFI						
C00147	VARJO						
C00001	MALEST						
C00002	MAKSI						
C00003	MAKSI						
C00002	MASTYP	02551	02552				
C00256	MAXFACIV						
C00255	MAXFACIV						
C00004	MAXIMO	02251	02251				
C00254	MAXKILL						
C00003	MAXOBY						
C00004	MCCHERN						
C00005	MCLASS						
C00006	MCTHYS						
C00357	MCODE						
C00007	MCONR						
C00010	MCONTP						
C00012	MDEWLS						
C00011	MDEW						
C00013	MGRUP						
C00253	MINKILL						
C00170	MINDR						
C10567	MIPV	02500	02501	02511	02511		
C01042	MIS	03274	03275	03304	03305		
C00223	MISREFF						
C00014	MPAYLND	02417	02420	02451	02452		
C00015	MRECOVER						
C00016	MRECVLG						
C00017	MREFF						
P00010	MREKMDR	03334	03515				
P00006	MREKMDY	02366	03503				
P00007	MREKMDP	02373	03514	03517			
C00020	MRTLEG						
C00021	MRTPT						
C00022	MSPERT						
C00023	MSTARCS						
C00024	MSTARCS	03567	03567	03635	03635		
		01244	01431	01431	02244		
		02052	02052				
C00025	MSTARCOL						
C00026	MSTARCPX						
C00027	MSTARCS						
C00030	MSTARST						
C00031	MSTARIND						
C00046	MSTARPL	02144	02146	02614	02614		
		00563	00564	00575	00575		
		01034	01101	01102	01106		
		01441	01341	01563	01563		
C00032	MSTARSEC	02125	02125	02744	02745		
C00033	MSTARFI						
C00034	MSTARVP	01003	01003	01007	01007		
C00035	MSTARVAL						
C00036	MTELMCM						
C00037	MTOIRAS						
C00040	MTYPE						

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C00217	NVA	00676	00676	00717	00717	01257	01257	01262	01262		
C00041	MVULN										
C00042	M-EAPGP										
C00407	MWDS										
C00043	MWHTPE	02573	02574	00451	00451	00457	00457	01366	01366	01401	01407
C00000	MYIGENT	01407	01446	01735	01735	01746	01746	02257	02257	02267	02267
		02327	02327	03421	03421	03460	03460				
C00044	MZONEPT										
C00045	MZONEFS	02533	02534								
P04066	N	02071	02101								
C03724	N1										
C04710	N2										
C00332	NADHLI										
C00333	NADHLR										
P04067	NADDC										
C00415	NADNT	00661	00667	00673	01507	01515	01517				
C00405	NAL	03154	03154								
C00301	NALHTOHL										
C00303	NALHTOHL										
C11577	NAMCLAS	00525	00526								
C00156	NAMF	03067	03067								
C00335	NARFADEC	02524	02524								
C00262	NASMS										
C00001	NASMT	02134	02135	02547	02547	02550	02551	02564	02564		
C00003	NRLUPLD	02141	02415	02415	02416	02417	02425	02430	02430	02440	02440
C00002	NC	00541	00542	00550	00551	00736	00737	01466	01466	01474	01526
		02433	02434	02465	02466	02444	02445	03235	03235		
C00074	NCHKFLG	00722	00722	01006	01006	02056	02056	02424	02424	02456	02543
		02543	02563	02563	02563	02607	02607	02620	02620	02751	03416
C00120	NCHKNUM	00725	00725	01000	01001	01002	01002	01265	01265	02060	02426
		02426	02460	02460	02460	02545	02545	02565	02565	02611	02624
		02753	02753								
C00263	NCM										
C00002	NCOL	01652	01653	02051	02051	02057	02057	02100	02100	03443	03443
C00242	NDECOYS	02521	02521								
C00411	NDET										
C00002	NDI-DIR										
C00003	NDI-MLIST										
C00003	NDI-MLIST										
P04070	NEWCON	01135	01140								
C01042	NEWIND										
X00023	NEXTITM	00750	01631	03365							
C00211	NEXTZONE										
C00000	NI										
C00000	NISL	01654	02076	02076	01607	01610	01611	01616	01616	01703	01704
C00003	NITE	01355	01355	01607	01607	02020	02020	03172	03172	03200	03201
		02015	02016	02017	02017	03165	03165	03172	03172	03200	03201
C00074	NLRR	03164	03164	03165	03165	03172	03172	03200	03200	03201	03201
C00176	NMPSTE	00537	00666	01514							
C00001	NN										
C00177	NORLERT										
C00260	NORAMP1										
C00261	NORAMP2	02475	02475	02507	02507	02507	02507				

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C00200	NOINCON								
C00433	NOPIKSOI								
C00434	NOPIKSO2								
C00435	NOPIKSO3								
C00175	NOPIKSO4								
C00000	NOPIKSO5								
C00001	NOPIKSO6								
C00410	NOPIKSO7								
C00004	NOPIKSO8								
C00003	NOPIKSO9								
C00005	NOPIKSO0								
C00006	NOPIKSO1								
C00356	NOPIKSO2								
C00000	NOPIKSO3								
P04071	NOPIKSO4								
C00337	NOPIKSO5								
C01001	NOPIKSO6								
P04072	NOPIKSO7								
C00000	NOPIKSO8								
C00434	NOPIKSO9								
C00001	NOPIKSO0								
C00002	NOPIKSO1								
C00000	NOPIKSO2								
C00336	NOPIKSO3								
C00355	NOPIKSO4								
C00345	NOPIKSO5								
P04073	NOPIKSO6								
C00001	NOPIKSO7								
X00022	NOPIKSO8								
P03577	NOPIKSO9								
P03614	NOPIKSO0								
C00014	NOPIKSO1								
C00412	NOPIKSO2								
C00284	NOPIKSO3								
C00315	NOPIKSO4								
C00266	NOPIKSO5								
C00277	NOPIKSO6								
C00314	NOPIKSO7								
C00000	NOPIKSO8								
C00314	NOPIKSO9								
C00317	NOPIKSO0								
C00425	NOPIKSO1								
C00311	NOPIKSO2								
C00352	NOPIKSO3								
C00353	NOPIKSO4								
C00215	NOPIKSO5								
C00173	NOPIKSO6								
C00313	NOPIKSO7								
C00372	NOPIKSO8								
X00040	NOPIKSO9								

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03670 03671 03672 03702 03702

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03670 03671 03672 03702 03702

F03661 UP000015.
P03672 UP000016.
P03704 UP000017.
P03717 UP000020.
P03727 UP000025.
P03740 UP000027.
P03747 UP000030.
P03760 UP000031.
C00221 VAL
C00441 VAL1
C00442 VAL2
C00222 VAL3
C00147 VALUF
X00025 VLMANT
C00162 VULN
C00165 *ACMG
C07242 WHB
C00240 WHTYPE
C00371 WHTYPEA
C00000 WP
X00027 *BARRAY
X00017 *BITECH
X00043 *BPHAT
X00024 *BSTMT
X00037 *BWDPO
P00473 *S00001.
P00604 *S00002.
P00705 *S00003.
P00767 *S00004.
P00777 *S00005.
P01143 *S00006.
P01164 *S00007.
P01204 *S00010.
P01232 *S00011.
P01275 *S00012.
P01320 *S00013.
P01345 *S00014.
P01362 *S00015.
P01423 *S00016.
P01442 *S00017.
P01541 *S00020.
P01657 *S00021.
P01727 *S00022.
P01754 *S00023.
P02116 *S00024.
P02131 *S00025.
P02152 *S00026.
P02303 *S00027.
P03403 *S00030.
C00004 X
C00016 XLONG
X00046 XMAXOF
X00045 XMINOF

01564 01463 03664 03665 03667 03670 03671 03672 03702 03702
02442 02474 03245 03571 03674 03675 03715 03715 03715 03715
02414 02446 03705 03706 03707 03714 03725 03725 03725 03725
03105 03113 03122 03123 03125 03131 03132 03132 03132 03132
03132 03141 03142 03143 03145 03145 03145 03145 03145 03145
03567 03751 03752 03753 03755 03756 03756 03756 03756 03756
03570 03762 03763 03764 03766 03766 03766 03766 03766 03766
00474 00474 01424 01424 02304 02304 02304 02304 02304 02304
00713 00713 00727 00727 00727 00727 00727 00727 00727 00727
02600 02601 02602 02603 02604 02605 02605 02605 02605 02605
02514 02516 02571 02600 02600 02600 02600 02600 02600 02600
01571 01571 01573 01573 01575 01575 01575 01575 01575 01575
02005 02007 02007 02007 02007 02007 02007 02007 02007 02007
00460 00460 01410 02279 02279 02279 02279 02279 02279 02279
03475 03475 01250 01332 03433 03450 03450 03450 03450 03450
03024 03033 03040 03040 03040 03040 03040 03040 03040 03040
00500 00500 00622 00622 00622 00622 00622 00622 00622 00622
00720 00720 00720 00720 00720 00720 00720 00720 00720 00720
01124 01124 01124 01124 01124 01124 01124 01124 01124 01124
01152 01152 01152 01152 01152 01152 01152 01152 01152 01152
01171 01171 01171 01171 01171 01171 01171 01171 01171 01171
01221 01221 01221 01221 01221 01221 01221 01221 01221 01221
01247 01247 01247 01247 01247 01247 01247 01247 01247 01247
01305 01305 01305 01305 01305 01305 01305 01305 01305 01305
01327 01327 01327 01327 01327 01327 01327 01327 01327 01327
02013 02013 02013 02013 02013 02013 02013 02013 02013 02013
02120 02120 02120 02120 02120 02120 02120 02120 02120 02120
02133 02133 02133 02133 02133 02133 02133 02133 02133 02133
02154 02154 02154 02154 02154 02154 02154 02154 02154 02154
02310 02310 02310 02310 02310 02310 02310 02310 02310 02310
03410 03410 03410 03410 03410 03410 03410 03410 03410 03410
01347 01347 01347 01347 01347 01347 01347 01347 01347 01347
01543 01543 01543 01543 01543 01543 01543 01543 01543 01543
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01701 01701 01701 01701 01701 01701 01701 01701 01701 01701

03670 03671 03672 03702 03702

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03670 03671 03672 03702 03702

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C07444 Y
C00257 YIELD
C17504 Z
C00010 ZONE
C00202 ZONE
C07470 ZONE
01520 SYMBOLS

01350 01622 01623 02004 02006
02001 02002 01624 02010 02010
01351 01624 01625 02010 02010
02161 02161 03100 03016 03101
02540 02540 03016 03115 03720
02540 02541 03115 03117 03117

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SUMROUTINE AMOVFL
AMOVFL 06AUG71 *****
C CUSE MAX START *****
C C COMMON BLOCK CONTAINING ALL MAXIMUM VALUES FOR QUICK OCT 71 *****
C C VALUES INITIALIZED WITH DATA STATEMENTS IN INITIO *****
C
COMMON/MAX/MAB*0F7, MAFRT, *ASMTYP, *MANDRY, MCCREGR,
1 *CLASS, *MCONTRYS, *MCOBR, *MCURTYP, *MIDEN,
2 *MRECNLS, *MGROUP, *MPAYLON, *MRECOVR,
3 *MREF, *MRTLEG, *MRTPT,
4 *MSPERM, *MTANKS, *MTAPCLS, *MTARCOL, *MTARCPX,
5 *MTABERS, *MTARGET, *MTAPIND, *MTARSEC, *MTARTEI,
6 *MTARTYP, *MTARVAL, *MELMCM, *MTOTBAS,
7 *MTYPE, *MVUL*, *WEAPGP, *MWHOTPE, *MZONEPT,
RMZONES, *MTAPCL, *MABWSIT
C
CEND MAX *****
CUSE 9 START *****
COMMON: /9/ ICHKFLG(30), ICHKNUM(30), NCHKFLG(20), NCHKNUM(20) *****
C
CEND 9 *****
CUSE TORN START *****
COMMON/TORN/ITWORD *****
EQUIVALENCE(TWORN, ITWORD) *****
C
CEND TWORN *****
CUSE ITP START *****
COMMON/ITP/ITP *****
C
CEND ITP *****
CUSE MYIDENT START *****
COMMON/MYIDENT/MYIDENT *****
C
CEND MYIDENT *****
C
DIMENSION NEMP(8) *****
ENTRY AMOVFL0 *****
DO 100 I=1,30 *****
IF(ICHKFLG(I).EQ.0) GO TO 550 *****
200 IF (I.GT.*MTAPCLS) 110,170 *****
120 J=I *****
GO TO 130 *****
110 J=I-MTAPCLS *****
130 PRINT 140, ICHKNUM(I), ICHKFLG(I), J *****
100 CONTINUE *****
DO 550 I=1,20 *****
IF(NCHKFLG(I).EQ.0) GO TO 550 *****
115 PRINT 380, NCHKNUM(I), NCHKFLG(I) *****
550 CONTINUE *****
ITP = 10 *****
MYIDENT = 8HSCATCH *****
CALL GETHEAD *****
ITP = 10 *****
CALL MODORD *****
IF( ITWORN .EQ. H-MENUZONER ) GO TO 400 *****
PRINT 141 *****

```


PROGRAM LENGTH	ENTRY POINTS	BLOCK NAMES
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
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91	91	91
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96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

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P00232	AHOVRFL	00232							
P00440	WEGIA	00440							
P00437	CEVRTI	00437							
P00013	CEVRTI	00013							
P00001	DICV	00001							
P00441	FAVLOG	00441							
P00000	EXIT	00000							
P00013	FUEAT	00013							
P00271	GG00000	00271							
P00312	GG00001	00312							
P00340	GG00002	00340							
P00346	GG00003	00346							
P00374	GG00004	00374							
P00420	GG00005	00420							
P00435	GG00006	00435							
P00442	I	00442							
C00000	ICMFLG								
C00036	ICMFLG								
P00440	ITITIL	00440							
C00000	ITP								
C00000	ITWOP								
P00271	100	00271							
P00277	100001	00277							
P00300	100002	00300							
P00331	100003	00331							
P00332	100004	00332							
P00406	100005	00406							
P00407	100006	00407							
P00427	100007	00427							
P00435	100008	00435							
P00252	110	00252							
P00300	115	00300							
P00250	120	00250							
P00255	130	00255							
P00244	200	00244							
P00353	2	00353							
P00400	3	00400							
P00412	400	00412							
P00360	410	00360							
P00420	420	00420							
P00312	550	00312							
P00013	100000	00013							
P00014	100001	00014							
P00015	100002	00015							
P00205	140	00205							
P00044	141	00044							
P00114	142	00114							
P00150	143	00150							
P00174	144	00174							
P00016	146	00016							
P00221	300	00221							
P00443	J	00443							

[illegible]

S.4TS AROVRF:

P00240 *S00001. 00272
P00274 *S00002. 00313
P00351 *S00003. 00356
P00376 *S00004. 00403
00156 SYMBOLS

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4CAPACTY(50,2),ICR(250),MIDV(50,2),
5IPIR(50,2),INRDS(50,2),INRDCYS(50,2),INRDEC(40,2)
6ANVCLAS(15)
7DIMENSION FMS(50,11),MIS(50,11)
8DIMENSION NEPI(4000)
9EQUIVALENCE(ME,INO,MIS,FMS,TYPENAM(251))
10TYPE INTEGER TYPENAM, TYPEPL, CUMNU, R1YPES
11DIMENSION INO(50,7),ITACK(40,5)
12EQUIVALENCE( I40,R0M),(ITACK,TAMR)
13
14C
15C
16CEND
17CUSE
18
19COMMON/7/COLO(12000),COMP(12000)
20DIMENSION LITEM(12000)
21TYPE LOGICAL COLO,COMP,LITEM
22EQUIVALENCE(COMP,LITEM)
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56 NY = YI-Y(J)
   DX=DX+CY
   DXY=CX+DX+DY+DY
   GO TO (57,61)LSN
57 CONTINUE
   IF(DXY.LT.D2)GO,100
   COL(I)=1 $ COL(J)=1
   CL(I)=1 $ CL(J)=1
   CL(J)=1
61 DC2=.25*DC2
   IF(DAY.LT.DC2)*2,100
62 CP(I)=1 $ CP(J)=1
   LCOMP(LI)=J
   LI=LI+1
   IF(LI.GT.MTELMCM) GO, 110
990 PRINT 991, MTELMCM,ICUR
   LI = MTELMCM
100 CONTINUE
102 IF(CL(I))101,400
101 CL(I)=0
   LI=LI+1
   IF(LI.GT.MTELMCM) 992,993
992 LI=MTELMCM
993 CONTINUE
   IF(LI.EQ.LI)112,110
110 I=LCOMP(LI)
   GO TO 398
112 IF(LI.EQ.2)118,114
114 KK=LI-1
   IF(IPRINT(R).EQ.0)115,1030
1030 CONTINUE
   PRINT 1031,ICUR
115 CONTINUE
   GO 116 KK,KK
   NTIND= LCOMP(K)
   JKE INCONTIND)
   IF(IPRINT(R).EQ.0)1034,1032
1032 CONTINUE
   PRINT 1033,JK
1034 CONTINUE
   COMP(JK)=1
   ISTORE=ISTORE+1
   IF(ISTORE.GT. MTARCPX) 420, 421
420 NCMKFLG(11)=6MCPX TGT5
   NCMKNIM(11)=ISTORE
   GO TO 116
421 CONTINUE
   CALL IPUT(KEYCI,ISTORE,JK,COMPLEX)
   CALL IPUT(KEYC2,ISTORE,ICUR,COMPLEX)
116 CONTINUE
   ICUR=ICUR+1
118 CONTINUE
   IP = LASTCL + 1
   JF=XMINOF(J,NITEM)
   DO 200 I=IR,JF
   IF(CT(I))397,206

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200 CONTINUE
NT=0
NN=0
DO 300 N=1,ASTCL,JF
  IF (CL(M))250,300
  250 NT=NT+1 & NN=NN+1
  IF (NN.GT.100)410,411
  410 NCH=ELG(10)=EMIN ISLMD
  NCH=QU(10)=NN
  GO TO 300
411 CONTINUE
  CL(M)=0
  IF (NT.FG.1)251,252
  251 M=M & MLE=M
  253 IF (IPRNT(7).EQ.0)300,253
  253 CONTINUE
  PRINT 1005
  GO TO 300
  252 IDY = (Y(M)-Y(ML))*3000.
  IDX=IDXF(ML,M)
  DO 1002 JXX=2,JYP
  IF (IND(M).LT.INDREG(JXX))1004,1002
  1002 CONTINUE
  JXX = NTYP + 1
  1004 NAM = TYPENAM(JXX - 1)
  IF (IPRNT(7).EQ.0)254,1006
  1006 PRINT 1007,IND(M),NAM,IDY,IDX,NN
  254 CONTINUE
  INDX=IND(M)
  COLAR(NM)=0
  CALL IPUT(INDREG,NN,INDX,COLAR)
  CALL IPUT(IDLAT,NN,IDX,COLAR)
  CALL IPUT(IDLONG,NN,IDX,COLAR)
  NTIND = IND(M)
  COLO(NTIND) = 1
  MLE=M
300 CONTINUE
  IDY = (Y(M)-Y(ML))*3000.
  IDX=IDXF(ML,M)
  NF=NN-NT+1
  DO 1065 JXX=2,JYP
  IF (IND(M).LT.INDREG(JXX))1066,1065
  1065 CONTINUE
  1066 NAM = TYPENAM(JXX - 1)
  IF (IPRNT(7).EQ.0)305,1067
  1067 PRINT 1007,IND(M),NAM,IDY,IDX,NF
  PRINT 1068
  305 CONTINUE
  INDX=IND(M)
  COLAR(NF)=0
  CALL IPUT(INDREG,NF,INDX,COLAR)
  CALL IPUT(INA,NN,NT,COLAR)
  CALL IPUT(IDLAT,NF,IDX,COLAR)
  CALL IPUT(IDLONG,NF,IDX,COLAR)
  NTIND = IND(M)
  COLO(NTIND) = 1

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ITP=2
CALL WHARRAY(COLAP,NN)
NCOL=NCOL+NN
NLSL=NLSL+1
IF(IPRINT(5))280,281
280 CONTINUE
1014 DO 1020 I=1,NN
      L1=IGET(INDNO,I,COLAR)
      L2=IGET(INDA,I,COLAR)
      L3=IGET(INDAT,I,COLAR)
      L4=IGET(INDLONG,I,COLAR)
      PRINT 1015,L1,L2,L3,L4,COLAR(I)
1020 CONTINUE
281 CONTINUE
400 CONTINUE
      RETURN
991 FORMAT('IHI: * MODE THREE, IR, * TARGETS IN COMPLEX*,IR)
999 FORMAT('PHENITF=,IA)
1005 FORMAT('///ISMOCOLLOCATION ISLAND/
      1104 INDEXNO,10H TYPE,
      284 INDAT,4H INLONG/)
1007 FORMAT('110,2A,AP,3IR)
1015 FORMAT('11,16,2IR,5X,016)
1031 FORMAT('///10MOTCOMPLEX=,15)
1033 FORMAT('110)
1069 FORMAT('///)
      END

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5.4.15 COLOCATE

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CO7172 ASST					
PO1120 REGIS.	01121				
CO5602 ROW					
CO0020 RTYPES					
CI0031 CAPACTY					
CO0175 CL	00130 00331 00334 00403 00550 00570				
CO0372 CLT	00133 00253 00337 00371 00410 00534				
PO1117 C-APT1.	00150 00367 00443 00465 00552 00654	00654	00655	00656	00762
CO0000 CO	00160 00765 00766 00767 01077 01100	01102			
CO0002 COLAB	00125 00200 00242 00323 00326				
	00667 00670 00674 00700 00704 01004	01010		01023	01024
	01036 01052 01057 01064 01071 01133	01104			
CO0000 COLO	00711 01031				
PO0111 COLOCAT					
PO3104 COLOCATE					
CO0567 COMP	00473				
CO0144 COMPLEX	00515				
CO0015 COSF	00222				
PO1136 COURT.	00121 00122 00247 00347 00352				
CO0567 CP	00136 00247				
CO0144 CPDIST	01114 01116 01116 01116 01116 01116	01116			
PO0003 CPFMT.	00141 00141				
CO0001 CUMMO					
CO0312 CVULL.					
PE1137 CY	00224 00306 00380				
PO1140 D	00301 00316 00342				
PO1141 D2	00160 00113 00145 00152 00154 00154	00223	00364	00440	00445
PO0001 DICT.	00462 00467 00507 00513 00526 00526	00605	00617	00662	00672
	00674 00702 00726 00756 00771 00774	00777	01006	01012	01022
	01035 01050 01055 01062 01067 01075	01106			
	00265 00265 00271 00271 00272 00272	00306	00307		
PO1143 DX	00311 00315 00342				
PO1144 DX	00305 00310 00310				
PO1122 ENCLING.	00197 00114 01115	01120			
PO0000 EXIT.	01123				
CE1042 FATS					
PO0003 FORMAT.	00501 00544				
PO0153 GENNOON.	00143				
PO0374 GENNOON1.	00362				
PO0446 GENNOON2.	00434				
PO0470 GENNOON3.	00460				
PO0604 GENNOON4.	00500				
PO0663 GENNOON5.	00544				
PO0772 GENNOON6.	00754				
PO1000 GENNOON7.	00772				
PE1107 GENNOON10.	01073				
PO1146 I	00116 00406 00424 00425 00524 00530	00167 00531 00532 00536 00536 00536	00211 00230 00230 01051 01056	00345 00345 00345 01070 01103	00401 00401 00401 00401 00401
PO1147 IA	0107				
PO1150 I-					
CO5602 IAGW					

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ED 0

C00002 IAREAK
 C10174 ICMK
 C00000 ICMAFLC
 C00036 ICMAFLC
 C00000 ICUM
 C00007 IOLAT
 C00010 IOLAR
 P01151 IOK
 P00011 IOK
 P01152 IOK
 C00000 IFTAPJ
 X00013 IGET
 P01153 IGOIN
 C11457 INADEC
 C27344 IND
 C00056 INDEG
 C00037 INOCLAS
 C05210 INOCUP
 C11337 INFCYS
 C00005 INKAN
 P01154 INK
 P01120 INITIAL
 C11173 INWRS
 C00000 IPKAT
 X00010 IPUT
 C00001 ISTWRF
 C06662 ITAK
 C00000 ITE
 C00000 ITWREN
 C11027 I-MOTVP
 P00376 .100
 P00631 .1002
 P00636 .1004
 P00644 .1006
 P00405 .101
 P01045 .1014
 P00401 .102
 P01107 .1020
 P00436 .1030
 P00460 .1032
 P00470 .1034
 P00743 .1045
 P00746 .1046
 P00754 .1047
 P00422 .110
 P00426 .112
 P00431 .114
 P00446 .115
 P00516 .116
 P00523 .118
 P00137 .2
 P00536 .200

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00677	01017	01063					
00703	01023	01070					
00621	00656	00704	00764	01024			
00616	00725						
00615	00655	00700	00765	01020			
01047	01054	01061					
00312							
00162	00453	00454	00624	00651	00651	00664	00705
00736	00736	00761	01001	01031	01025	01025	00705
00626	00626	00740	00740				
00673	01007	01051					
00665	00674	01002	01010				
00107	00114						
00433	00433	00455	00575	00576	00641	00641	01042
01043	00504	00612	00701	01005	01011	01015	01021
00474	00474	00475	00503	00503	00510	00514	
01032	01033						
00232	00250	00255	00274	00316	00317	00343	00343
00627	00627						
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SATS COLOCATE

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P00552 .250	00551				
P00573 .251					
P00607 .252	00572				
P00600 .253	00577				
P00663 .254	00643				
P01045 .255	01043				
P01112 .256	01044				
P00245 .257	00243				
P00251 .300					
P00713 .301	00551	00564	00577	00606	
P01000 .302	00743				
P00256 .31	00254				
P00205 .307	01535				
P00211 .394	00425				
P00202 .309					
P01112 .406					
P00270 .41	00201				
P00565 .410	00267				
P00565 .411					
P00272 .42	00557	00557			
P00501 .420	00264	00267			
P00504 .421	00500				
P00233 .44	00477	00500			
P00249 .50	00231				
P00240 .51	00237				
P00275 .53	00244				
P00302 .55	00274				
P00315 .57					
P00320 .40	00313				
P00340 .41					
P00344 .42	00314				
P00171 .4					
P00225 .44					
P00362 .490					
P00415 .502					
P00417 .503					
P00143 .504	00414				
P00124 .504554	00221	00263	00307	00311	
P00083 .100000	00501				
P00094 .1000001	00560				
P00027 .10005	00603				
P00052 .10007	00447	00757			
P00060 .10015	01074				
P00047 .10031	00441				
P00074 .10033	00463				
P00101 .10045	00775				
P00005 .1001	00355				
P00022 .10005	00144				
P00155 .1	00226	00231	00233	00240	00245
	00353	00374	00527	00261	00276
	00530	00537	00714	00303	00324
P00156 .15	00455	00464	00471	00307	00324
P00157 .16	00022	00425	00631	00743	00746
P00160 .16	00447	00450	00516		
P00161 .16					

11

1122

[illegible]

DATE	TIME	LOCATION	WIND	WAVE	SEA	WAVE	SEA
01-12-57	00350	00374	00314	00413	00415	00415	00415

Reproduced from
best available copy.

011440	90443	011750	90763
011440	90443	011750	90763

19500	19500	20500	20500
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00563	00563	00563
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01037 01037 01060

00155	00161	00171	00172
00156	00162	00172	00173
00157	00163	00173	00174
00158	00164	00174	00175
00159	00165	00175	00176
00160	00166	00176	00177
00161	00167	00177	00178
00162	00168	00178	00179
00163	00169	00179	00180
00164	00170	00180	00181
00165	00171	00181	00182
00166	00172	00182	00183
00167	00173	00183	00184
00168	00174	00184	00185
00169	00175	00185	00186
00170	00176	00186	00187
00171	00177	00187	00188
00172	00178	00188	00189
00173	00179	00189	00190
00174	00180	00190	00191
00175	00181	00191	00192
00176	00182	00192	00193
00177	00183	00193	00194
00178	00184	00194	00195
00179	00185	00195	00196
00180	00186	00196	00197
00181	00187	00197	00198
00182	00188	00198	00199
00183	00189	00199	
00184	00190		
00185	00191		
00186	00192		
00187	00193		
00188	00194		
00189	00195		
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00191	00197		
00192	00198		
00193	00199		
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1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399</
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001241	00147	00147
00136	00117	00147

00542	00543	00554	00554
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DATE	DESCRIPTION	AMOUNT	BALANCE
1905	1905	1905	1905
1906	1906	1906	1906
1907	1907	1907	1907
1908	1908	1908	1908
1909	1909	1909	1909
1910	1910	1910	1910
1911	1911	1911	1911
1912	1912	1912	1912
1913	1913	1913	1913
1914	1914	1914	1914
1915	1915	1915	1915
1916	1916	1916	1916
1917	1917	1917	1917
1918	1918	1918	1918
1919	1919	1919	1919
1920	1920	1920	1920
1921	1921	1921	1921
1922	1922	1922	1922
1923	1923	1923	1923
1924	1924	1924	1924
1925	1925	1925	1925
1926	1926	1926	1926
1927	1927	1927	1927
1928	1928	1928	1928
1929	1929	1929	1929
1930	1930	1930	1930
1931	1931	1931	1931
1932	1932	1932	1932
1933	1933	1933	1933
1934	1934	1934	1934
1935	1935	1935	1935
1936	1936	1936	1936
1937	1937	1937	1937
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1939	1939	1939	1939
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1941	1941	1941	1941
1942	1942	1942	1942
1943	1943	1943	1943
1944	1944	1944	1944
1945	1945	1945	1945
1946	1946	1946	1946
1947	1947	1947	1947
1948	1948	1948	1948
1949	1949	1949	1949
1950	1950	1950	1950
1951	1951	1951	1951
1952	1952	1952	1952
1953	1953	1953	1953
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1955	1955	1955	1955
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1957	1957	1957	1957
1958	1958	1958	1958
1959	1959	1959	1959
1960	1960	1960	1960
1961	1961	1961	1961
1962	1962	1962	1962
1963	1963	1963	1963
1964	1964	1964	1964
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1966	1966	1966	1966
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1969	1969	1969	1969
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1971	1971	1971	1971
1972	1972	1972	1972
1973	1973	1973	1973
1974	1974	1974	1974
1975	1975	1975	1975
1976	1976	1976	1976
1977	1977	1977	1977
1978	1978	1978	1978
1979	1979	1979	1979
1980	1980	1980	1980
1981	1981	1981	1981
1982	1982	1982	1982
1983	1983	1983	1983
1984	1984	1984	1984
1985	1985	1985	1985
1986	1986	1986	1986
1987	1987	1987	1987
1988	1988	1988	1988
1989	1989	1989	1989
1990	1990	1990	1990

1-541 0-553 00553 00571

000341	0.032	0022	10341
001213	0.056		

00452 00453 00706 00707

DATE	DESCRIPTION	AMOUNT	BALANCE
10/1/66	10/1/66	107.44	107.44
10/2/66	10/2/66	107.44	107.44
10/3/66	10/3/66	107.44	107.44
10/4/66	10/4/66	107.44	107.44
10/5/66	10/5/66	107.44	107.44
10/6/66	10/6/66	107.44	107.44
10/7/66	10/7/66	107.44	107.44
10/8/66	10/8/66	107.44	107.44
10/9/66	10/9/66	107.44	107.44
10/10/66	10/10/66	107.44	107.44
10/11/66	10/11/66	107.44	107.44
10/12/66	10/12/66	107.44	107.44
10/13/66	10/13/66	107.44	107.44
10/14/66	10/14/66	107.44	107.44
10/15/66	10/15/66	107.44	107.44
10/16/66	10/16/66	107.44	107.44
10/17/66	10/17/66	107.44	107.44
10/18/66	10/18/66	107.44	107.44
10/19/66	10/19/66	107.44	107.44
10/20/66	10/20/66	107.44	107.44
10/21/66	10/21/66	107.44	107.44
10/22/66	10/22/66	107.44	107.44
10/23/66	10/23/66	107.44	107.44
10/24/66	10/24/66	107.44	107.44
10/25/66	10/25/66	107.44	107.44
10/26/66	10/26/66	107.44	107.44
10/27/66	10/27/66	107.44	107.44
10/28/66	10/28/66	107.44	107.44
10/29/66	10/29/66	107.44	107.44
10/30/66	10/30/66	107.44	107.44
10/31/66	10/31/66	107.44	107.44
11/1/66	11/1/66	107.44	107.44
11/2/66	11/2/66	107.44	107.44
11/3/66	11/3/66	107.44	107.44
11/4/66	11/4/66	107.44	107.44
11/5/66	11/5/66	107.44	107.44
11/6/66	11/6/66	107.44	107.44
11/7/66	11/7/66	107.44	107.44
11/8/66	11/8/66	107.44	107.44
11/9/66	11/9/66	107.44	107.44
11/10/66	11/10/66	107.44	107.44
11/11/66	11/11/66	107.44	107.44
11/12/66	11/12/66	107.44	107.44
11/13/66	11/13/66	107.44	107.44
11/14/66	11/14/66	107.44	107.44
11/15/66	11/15/66	107.44	107.44
11/16/66	11/16/66	107.44	107.44
11/17/66	11/17/66	107.44	107.44
11/18/66	11/18/66	107.44	107.44
11/19/66	11/19/66	107.44	107.44
11/20/66	11/20/66	107.44	107.44
11/21/66	11/21/66	107.44	107.44
11/22/66	11/22/66	107.44	107.44
11/23/66	11/23/66	107.44	107.44
11/24/66	11/24/66	107.44	107.44
11/25/66	11/25/66	107.44	107.44
11/26/66	11/26/66	107.44	107.44
11/27/66	11/27/66	107.44	107.44
11/28/66	11/28/66	107.44	107.44
11/29/66	11/29/66	107.44	107.44
11/30/66	11/30/66	107.44	107.44
12/1/66	12/1/66	107.44	107.44
12/2/66	12/2/66	107.44	107.44
12/3/66	12/3/66	107.44	107.44
12/4/66	12/4/66	107.44	107.44
12/5/66	12/5/66	107.44	107.44
12/6/66	12/6/66	107.44	107.44
12/7/66	12/7/66	107.44	107.44
12/8/66	12/8/66	107.44	107.44
12/9/66	12/9/6		

6.1153

41504

2716

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97146

00377	00377	00527	01113	01113
00502	00562	00657	00657	00666
01013	01036	01040	01110	01110

00377 00377 00527 01113 01113

00502	00562	00657	00666
00502	00562	00657	00666

00547
00330 00333 00336 00346 00351

00755 00773 01074

11/26/71

PAGE NO.

1

```

SUBROUTINE FINFIT
  CSUBR      FINFIT  START *****
  COMMON/MASK/MASK
  DATA(MASK1=7777600000000000R)
  CUSE      3      NAPT71 *****
  COMMON/3/ICUR, ISTOKE, COLAR(100), COMPLEX(4000)
  TYPE INTEGER COLAR, COMPLEX
  DIMENSION CRUIST(100), CVULN(100)
  TYPE INTEGER CVULN
  EQUIVALENCE(CRUIST, COMPLEX), (CVULN, COMPLEX(101))
  C
  CEND      3      *****
  ICUR1=ICUR2**34
  ICUR2=(ICUR1.AND.MASK1)
  DO 50 I=1,ISTOKE
    IF(ITEST1=COLAR(I).AND.MASK1)
      GO TO 50
  50 CONTINUE
  CALL ARORT
  60 ICUR=I
  RFTURN
  END

```

5.415 FINDIT

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

FINDIT

MASK

3

EXTERNAL SYMBOLS

Q2W07000
QAGDICT.
AROW1

IDENT

00052

00004

00001

10000

FINDIT

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ED 0

PAGE NO.

2

SLOTS FINDI

11/26/71 E0 0 PAGE NO. 3

X00003	ABORT	00034		
P00041	BEGIN.	00041		
C00002	COLAR	00024	00024	
C00146	COMPLEX			
C00146	CRDST			
C00312	CVULN			
P00001	DICT.	00004	00011	00035
P00042	ENDING.	00007	00040	
P00000	EXIT.	00042		
P00004	FINDI	00004		
P00046	I	00021	00023	00031
C00000	ICU2	00015	00015	00037
P00047	ICU1	00017		
P00050	ICU2	00020	00027	
P00041	INITIAL.	00007		
C00071	ISTOPF	00032	00032	
P00051	ITESTIT	00026		
P00031	.50	00027		
P00036	.60	00030		
P00043	.EMASER.	00014	00014	
C00000	MASK			
P00003	MASK1	00017	00025	
X00001	22007000	00010		
X00002	22007000	00000	00005	
P00032	TSR0001.	00022		
P00023	-SR0001.	00033	00033	
00032	SYN40LS			

```

      FUNCTION ICPL(INDEX,N)
      ICPL  START *****
      CUSE  3  NADPT1 *****
      COMMON/RAICOM,ISTORE,COLAM(100),COMPLEX(4000)
      TYPE INTEGER COLAM, COMPLEX
      DIMENSION CROUTS(100),CVULN(100)
      TYPE INTEGER CVULN
      EQUIVALENCE(CROUTS,COMPLEX),(CVULN,COMPLEX(101))

      C      *****
      CE IN  3  *****
      CUSE  KEYC START *****
      COMMON/KEYC/KEYC1,KEYC2,MASK1,MASK2

      C      *****
      CE IN  KEYC *****
      DATA(MASK3=777777H)
      M=INDEX.AND.MASK3
      DO 10 I=1,N
      IN=COMPLX(I).AND.MASK3
      IF(IN.EQ.M)20,10
      CONTINUE
      ICPL=0
      RETURN
      20 ICPL=IGFT(KEYC2,I,COMPLEX)
      RETURN
      END

```

ICPL

IDENT

00101
00004
10004
00004PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

ICPL

3

KEYC

EXTERNAL SYMBOLS
Q0001C1.

IGET

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ED 0

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3

P00037 REGEX.	00057	00066	00072	
C00002 COLAR			00033	
C00146 COMPLEX	00016	00016		
C00146 CRDIST				
C00312 CVULN				
P00001 DICT.	00006	00031	00042	00043
P00060 ENDING.	00007	00027	00035	00037
P00000 EXIT.	00064			
P00010 FP00001.	00051	00052		
P00024 FP00002.	00055	00056		
P00075 GETPL.	00044	00053		
P00065 GETPU.	00047	00071		
P00076 I	00013	00015	00023	00032
P00004 ICPL	00004			
C00000 ICUR				
X00002 IGET	00030			
P00077 IND	00020			
P00004 INDEX	00010			
P00037 INITIAL.	00007			
C00001 ISTORF				
P00023 *10	00021			
P00030 *20	00022			
C00000 KEYC1				
C00001 KEYC2	00032			
P00100 M	00012	00021		
C00002 MASK1				
C00003 MASK2				
P00003 MASK3				
P00004 N	00011	00017		
P00053 PF00002.	00024			
P00057 PF00003.	00050			
X00001 ORQUIC1.	00006	00005		
P00024 TS00001.	00014			
P00036 VALUE.	00027	00034	00043	
P00015 WS00001.	00025	00025		
00043 SYMBOLS				

FTNS.5

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```

FUNCTION IDNF(I,K)
  CSUHR  IDNF  START *****
  CUSE   I     START *****
          COMMON/1/NISL,NANCOL,NITEM,X(4000),Y(4000),Z(4000),IND(4000)
          DIMENSION STATUS(12000)
          EQUIVALENCE(STATUS,X)

  C      NISL = NUMBER OF COLLOCATED ISLANDS
  C      NN = INDEX TO COLLOC
  C      NCOL = NUMBER OF COLLOCATED TARGETS
  C      NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.
  C      X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE
  C      IND = INDEX NUMBER OF X,Y,Z
  C      STATUS = PACKED DATA FOR TARGETS

  C      I
  C      IND=X(N)-X(IJ)
  C      IF (ABSF(DX).LE.140.)50,10
  C      10 IF (DX)30,20,20
  C      20 DX=360.-DX
  C      GO TO 50
  C      30 DX=-360.-DX
  C      50 IDNF=DX*3000.*COSF(Y/J)*.017453)
  C      RETURN
  C      END

```

1000
33000
2000
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
3000
4000
5000
6000
7000
8000
9000
10000
11000

5.4TS

IDXF

PROGRAM LENGTH

ENTRY POINTS

BLOCK NAMES

EXTERNAL SYMBOLS

00111

00003

37204

IDXF

1

Q1010100

ORADICT.

COSF

IDXF

IDENT

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ED

0

PAGE NO.

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5.415

INDEX

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EQ

0

PAGE NO.

3

PQ0042 PF474.
 X00003 COSF.
 PQ0001 DTCT.
 PQ0110 IN.
 PQ0005 FADING.
 PQ0000 EXIT.
 PQ0007 FROG001.
 PQ0011 FROG002.
 PQ0027 FROG003.
 PQ0102 GETPL.
 PQ0072 GETPU.
 PQ0003 INX.
 C27344 INB.
 PQ0042 INITIAL.
 PQ0020 A10.
 PQ0022 A20.
 PQ0025 A30.
 PQ0027 A50.
 PQ0103 APLACER.
 PQ0003 J.
 PQ0003 A.
 C00002 ACOL.
 C00000 ATSL.
 C00003 ATTEM.
 C00001 NA.
 PQ0060 PFC0002.
 PQ0064 PFC0003.
 X00001 Q1000100.
 X00002 QREQICT.
 C00004 STATUS.
 PQ0041 VALUF.
 C00004 X.
 C07644 Y.
 C17504 Z.
 PQ0042 SY-ARLS

00064
 00033
 00005
 00013
 00006
 00071
 00002
 00054
 00057
 00060
 00052
 00063
 00004
 00016
 00021
 00021
 00016
 00032
 00011
 00007
 00053
 00001
 00034
 00007
 00003
 00010
 00030
 00070
 00010
 00030

00073
 00045
 00023
 00043
 00026
 00045
 00026
 00044
 00035
 00044

00017 00024

00027

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00014 00012

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C	MPEN	50	DEFENSATION COMMONS(POINTS)	10200
C	MPENLG	50	DEFENSATION LEGS	10300
C	MPAYLGD	40	PAYLOAD TYPES (PER SIDE) (40)	10400
C	MPENLG	30	DEFENSATION COMMONS	10500
C	MPENLG	40	RECOVERY EGGS	10600
C	MPENLG	200	RECOVERY BASES(POINTS)	10700
C	MPENLG	20	REFUEL POINTS(DIRECTED) (20)	10800
C	MPENLG	200	ROUTE LEGS	10900
C	MPENLG	200	ROUTE POINTS	11000
C	MPENLG	5	SITES PER MULTIPLE TARGET(S)	11100
C	MPENLG	50	TANKER BASES	11200
C	MPENLG	5000	TARGETS (ALLOCATOR)	11300
C	MPENLG	15	TARGET CLASS(S)(13)	11400
C	MPENLG	4000	TARGETS COLLOCATED	11500
C	MPENLG	2500	TARGET COMPLEX WITH VAL GTO	11600
C	MPENLG	4000	TARGET COMPLEXES (TOTAL)	11700
C	MPENLG	4000	TARGET ELEMENTS PER COMPLEX	11800
C	MPENLG	40	TARGET INDEX NUMBERS	11900
C	MPENLG	12000	TARGETS PER COLLOCATION ISLAND	12000
C	MPENLG	100	TARGET PER EARTH SECTION	12100
C	MPENLG	4000	TARGET TYPES-TOTAL	12200
C	MPENLG	250	TARGET TYPES-TOTAL	12300
C	MPENLG	250	TGT TYPES PER CLASS	12400
C	MPENLG	40=MSL OR HMAR=20=GTWERS	TGT TYPES PER CLASS	12500
C	MPENLG	500	TGT TYPES PER CLASS	12600
C	MPENLG	100	TGT TYPES PER CLASS	12700
C	MPENLG	100	TGT TYPES PER CLASS	12800
C	MPENLG	100	TGT TYPES PER CLASS	12900
C	MPENLG	100	TGT TYPES PER CLASS	13000
C	MPENLG	100	TGT TYPES PER CLASS	13100
C	MPENLG	100	TGT TYPES PER CLASS	13200
C	MPENLG	100	TGT TYPES PER CLASS	13300
C	MPENLG	100	TGT TYPES PER CLASS	13400
C	MPENLG	100	TGT TYPES PER CLASS	13500
C	MPENLG	100	TGT TYPES PER CLASS	13600
C	MPENLG	100	TGT TYPES PER CLASS	13700
C	MPENLG	100	TGT TYPES PER CLASS	13800
C	MPENLG	100	TGT TYPES PER CLASS	13900
C	MPENLG	100	TGT TYPES PER CLASS	14000
C	MPENLG	100	TGT TYPES PER CLASS	14100
C	MPENLG	100	TGT TYPES PER CLASS	14200
C	MPENLG	100	TGT TYPES PER CLASS	14300
C	MPENLG	100	TGT TYPES PER CLASS	14400
C	MPENLG	100	TGT TYPES PER CLASS	14500
C	MPENLG	100	TGT TYPES PER CLASS	14600
C	MPENLG	100	TGT TYPES PER CLASS	14700
C	MPENLG	100	TGT TYPES PER CLASS	14800
C	MPENLG	100	TGT TYPES PER CLASS	14900
C	MPENLG	100	TGT TYPES PER CLASS	15000
C	MPENLG	100	TGT TYPES PER CLASS	15100
C	MPENLG	100	TGT TYPES PER CLASS	15200
C	MPENLG	100	TGT TYPES PER CLASS	15300
C	MPENLG	100	TGT TYPES PER CLASS	15400
C	MPENLG	100	TGT TYPES PER CLASS	15500
C	MPENLG	100	TGT TYPES PER CLASS	15600
C	MPENLG	100	TGT TYPES PER CLASS	15700
C	MPENLG	100	TGT TYPES PER CLASS	15800
C	MPENLG	100	TGT TYPES PER CLASS	15900
C	MPENLG	100	TGT TYPES PER CLASS	16000
C	MPENLG	100	TGT TYPES PER CLASS	16100
C	MPENLG	100	TGT TYPES PER CLASS	16200
C	MPENLG	100	TGT TYPES PER CLASS	16300
C	MPENLG	100	TGT TYPES PER CLASS	16400
C	MPENLG	100	TGT TYPES PER CLASS	16500
C	MPENLG	100	TGT TYPES PER CLASS	16600
C	MPENLG	100	TGT TYPES PER CLASS	16700
C	MPENLG	100	TGT TYPES PER CLASS	16800
C	MPENLG	100	TGT TYPES PER CLASS	16900
C	MPENLG	100	TGT TYPES PER CLASS	17000
C	MPENLG	100	TGT TYPES PER CLASS	17100
C	MPENLG	100	TGT TYPES PER CLASS	17200
C	MPENLG	100	TGT TYPES PER CLASS	17300
C	MPENLG	100	TGT TYPES PER CLASS	17400
C	MPENLG	100	TGT TYPES PER CLASS	17500
C	MPENLG	100	TGT TYPES PER CLASS	17600
C	MPENLG	100	TGT TYPES PER CLASS	17700
C	MPENLG	100	TGT TYPES PER CLASS	17800
C	MPENLG	100	TGT TYPES PER CLASS	17900
C	MPENLG	100	TGT TYPES PER CLASS	18000
C	MPENLG	100	TGT TYPES PER CLASS	18100
C	MPENLG	100	TGT TYPES PER CLASS	18200
C	MPENLG	100	TGT TYPES PER CLASS	18300
C	MPENLG	100	TGT TYPES PER CLASS	18400
C	MPENLG	100	TGT TYPES PER CLASS	18500
C	MPENLG	100	TGT TYPES PER CLASS	18600
C	MPENLG	100	TGT TYPES PER CLASS	18700
C	MPENLG	100	TGT TYPES PER CLASS	18800
C	MPENLG	100	TGT TYPES PER CLASS	18900
C	MPENLG	100	TGT TYPES PER CLASS	19000
C	MPENLG	100	TGT TYPES PER CLASS	19100
C	MPENLG	100	TGT TYPES PER CLASS	19200
C	MPENLG	100	TGT TYPES PER CLASS	19300
C	MPENLG	100	TGT TYPES PER CLASS	19400
C	MPENLG	100	TGT TYPES PER CLASS	19500
C	MPENLG	100	TGT TYPES PER CLASS	19600
C	MPENLG	100	TGT TYPES PER CLASS	19700
C	MPENLG	100	TGT TYPES PER CLASS	19800
C	MPENLG	100	TGT TYPES PER CLASS	19900
C	MPENLG	100	TGT TYPES PER CLASS	20000

```

COMMON/TRANS/L*AX,NASMT,NVULN,NNLUPLD,MAXIND,NHEDPLO
C
CEND
CUSE
TRANS
T*ORD START
COMMON/T*ORD/T*ORD
EQUIVLFNCE(T*ORD,T*ORD)
C
CEND
CUSE
T*ORD
T*ORD START
COMMON/WRIT/WR(4),NR(10),XLONG(10)
DIMENSION IPR(4)
EQUIVLFNCE(WR,T*PR)
DIMENSION KZON(3)
C
CEND
CUSE
WRIT
EDITAPE START
COMMON/EDITAPE/INTP,NOUT, IINUT(10),JOUT
EDITAPE
EDITERM START
COMMON/EDITERM/ISUTERM
EDITERM
PROCESS START
COMMON/PROCESS/AINV,NC,INTFM(100),VALUE(500),
1 DEF(500), LGLCH(500)
TYPE LOGICAL DEF, LGLCH
TYPE INTEGER VALUE
TYPE INTEGER PAYLOAN
TYPE INTEGER T*TH
EQUIVLFNCE( ICOMPLX, ICOMPLX)
EQUIVLFNCE( ADEFCOMP, ADEFCOMP)
TYPE INTERP ADEFZON, ADEFZON, ADEFZON, AZON2, AZON3, ASMTYPE, WHDTYPE,
1 ZONE
EQUIVLFNCE(NOPRSON, NOPRSON)
PROCESS
1 START
COMMON/1/ISL, IN, PCOL, ITPR, X(4000), Y(4000), Z(4000), IFN(4000)
DIMENSION STATUS(12000)
EQUIVLFNCE(STATUS,X)
C
CEND
CUSE
NISL = NUMBER OF COLLOCATED ISLANDS
NA = INDEX TO COLAP
NCOL = NUMBER OF COLLOCATED TARGETS
NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.
X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE
IN = INDEX NUMBER OF X,Y,Z
STATUS = PACED DATA FOR TARGETS
C
CEND
CUSE
1 START
COMMON/2/COL(4000), CLT(4000), CLT(4000), CP(4000)
TYPE LOGICAL COL, CL, CL, CP
C
CEND
CUSE
2
3
RAPH71

```

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```

C      CLEAR XLONGS CF /WRIT/
C      DATA ('ONG = 15.. 95.. 110.. 170.. 360.. 320.. 0.. 0.. 0.. 0..)
        CLEAR COMMON /NVEADAL/
    DO 10 I=1,20
        AIN(I) = 0
        NLOW(I) = 0
        INVEMLP(I) = 1
    CONTINUE
    DO 20 I=21,60
        AIN(I) = 0
    CONTINUE
C      (CLEAR COMMONS /IFTRNT/ + /KEY/)
    DO 30 I=1,10
        IFIPRNT(I) = 1
        KEY(I) = 0
    CONTINUE
C      (CLEAR COMMON /KEYS/)
    DO 40 I=1,12
        KEY(I) = 0
    CONTINUE
C      (CLEAR COMMON /NAVALTR/)
        ITMAX = 10
        JOMLMAX = 0
        DO 50 I=1,1000
            TRASAT(I) = 0.
            DELASAT(I) = 0.
    CONTINUE
C      (CLEAR COMMON /RADATA/)
    DO 60 I=1,8
        PR(I) = 0.
        PA(I) = 0.
        OR(I) = 0.
        OA(I) = 0.
    CONTINUE
    DO 70 I=9,12
        PR(I) = 0.
        PA(I) = 0.
    CONTINUE
C      (CLEAR COMMON /WRIT/ (EXCEPT XLONG))
    DO 80 I=1,4
        WR(I) = 0
    CONTINUE
    DO 100 I=1,10
        NR(I) = 0
    CONTINUE
C      (CLEAR COMMONS /EDITAPE, /ENTYPE/,
        INTP = 0
        KOUT = 0
        JOUT = 0
        DO 110 I=1,10
            ITOUT(I) = 0
    CONTINUE
    ISWTFLOW = 0
C      NT = 0
        NV = 0

```

```

NC = 0
DO 120 I=1,100
  INITC(I) = 0
120 CONTINUE
DO 130 I=1,500
  VALU(I) = 0
  DEF(I) = 0
  LGLOM(I) = 0
130 CONTINUE

```

C

CLEAR COMMON /1/, /2/

```

NISL = 0
NN = 0
NCOL = 0
NITEM = 0
DO 150 I=1,MTARCCL
  X(I) = 0.
  Y(I) = 0.
  Z(I) = 0.
  IND(I) = 0
  COL(I) = 0
  CL(I) = 0
  CLT(I) = 0
  CP(I) = 0
150 CONTINUE

```

C

CLEAR COMMON /3/

```

ICUM = 1
ISTONE = 0
DO 160 I=1,MTAREMS
  COLAR(I) = 0
160 CONTINUE
DO 170 I=1,MTACCPX
  COMPLEX(I) = 0
170 CONTINUE

```

C

CLEAR COMMON /4/

```

MULL = 0
DO 180 I=1,MTARCLS
  CUMNO = 0
  RTYPES = 0
  INDCLAS = 0
180 CONTINUE
DO 190 I=1,MTARTYP
  INDREG(I) = 0
  INDCLAR(I) = 0
  ICHK(I) = 0
190 CONTINUE
  JMAX = MTYPE * 15
DO 200 I=1,JMAX
  TYPENAM(I) = 0
  TYPETPL(I) = 0
200 CONTINUE
  JMAX = MTYPE * 7
DO 210 I=1,JMAX
  IROM(I) = 0
210 CONTINUE
DO 220 I=1,200
  ITANK(I) = 0

```

```

223000
224000
225000
226000
227000
228000
229000
230000
231000
232000
233000
234000
235000
236000
237000
238000
239000
240000
241000
242000
243000
244000
245000
246000
247000
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252000
253000
254000
255000
256000
257000
258000
259000
260000
261000
262000
263000
264000
265000
266000
267000
268000
269000
270000
271000
272000
273000
274000
275000
276000
277000
278000

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1141

FTNS.5

END

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9

335000

3142

5.415 INITIND

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

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ED 0

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10

IDENT INITIND

00500	INITIND
00004	COMMON
00003	AMEADAT
00144	IFIP-INT.
00012	ITP
00001	KEY
00012	KEYC
00004	KEYS
00014	MAX
00050	MYIDENT
00001	NAVALTH
00312	NOPTINT
00001	RADATA
00050	PPT
00017	THATS
00004	TWOD
00001	WPT
00030	EDITAPE
00015	EDITERM
00001	PROCESS
01173	1
37204	2
00764	3
10004	4
11614	5
02001	7
01354	9
00144	10
00120	

EXTERNAL SYMBOLS
G3010040
OP00101.

5.4TS INITIND

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C00120	IOVERLP	00020							
C00000	IPRNT	00006							
C00001	ISTOPE	00204							
C00000	ISWTFHM	00123							
C06662	ITANK	00307							
C00001	ITEMM	00411							
C00310	ITMAX	00045							
C00002	ITOUT	00120							
C00000	ITP	00006							
C00000	ITWORO	00006							
C11027	IWMNTYP	00347							
C00000	IWR								
P00021	.10								
P00111	.100								
P00122	.110								
P00135	.120								
P00150	.130								
P00203	.150								
P00216	.160								
P06227	.170								
P00243	.180								
P00256	.190								
P00027	.20								
P06271	.200								
P00303	.210								
P00311	.220								
P00323	.230								
P00335	.240								
P00351	.250								
P00363	.260								
P00371	.270								
P00400	.280								
P00414	.290								
P00036	.30								
P00432	.300								
P00440	.310								
P00044	.40								
P00055	.50								
P00066	.60								
P00075	.70								
P00452	.818								
P00463	.830								
P00103	.90								
P00477	JMAX	00261	00262	00274	00275	00314	00315	00326	00354
		00355	00404	00406	00417	00420	00443	00444	
		00115							
C00014	JOUT								
C00006	KARDEF								
C00004	KATTACK								
C00012	KDEFCON								
C00011	KDEFZON								
C00000	KEY	00035	00042	00043					
C00000	KEYC1	00035	00042	00043					
C00001	KEYC2								
C00000	KEYS								

5.415 INITIND

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C00000	KNARRAY	00434	00437		
C00007	KTERM				
P00003	KZON				
C01153	LGLOR	00147			
C00000	LHAX	00006			
C00567	LTERM				
C00000	MABMOFZ	00006			
C00047	MARMSIT	00006			
C00001	MALERT	00006			
C00002	MASK1	00002			
C00003	MASK2	00006			
C00002	MASSTYP	00006	00312	00312	
C00004	MAXIND	00004			
C00003	MRNDRY	00006			
C00004	MCCHEGN	00006			
C00005	MCLASS	00006			
C00006	MCNTRY5	00006			
C00007	MCOHR	00006			
C00010	MCORTYP	00006			
C00012	MDEPNLG	00006			
C00011	MCHEN	00006			
C00013	MGROUP	00006			
C10567	MIRV	00367	00370		
C01042	MIS				
C00014	MPAYLOD	00006			
C00015	MRECOVR	00006			
C00016	MRECVLG	00006			
C00017	MREF	00006			
C00020	MRTLEG	00006			
C00021	MRTPT	00006			
C00022	MSPERMT	00006			
C00023	MTANK85	00006			
C00024	MTANCLS	00006	00233	00441	00442
C00025	MTARCOL	00006	00157	00415	00416
C00026	MTARCPX	00006	00220	00221	
C00027	MTARERS	00006	00210	00216	
C00030	MTARGET	00006			
C00031	MTARIND	00006			
C00046	MTARPCL	00006			
C00032	MTARSEC	00006			
C00033	MTARTEI	00006			
C00034	MTARTYP	00006			
C00035	MTARVAL	00006	00402	00403	
C00036	MTELMCM	00006	00245	00246	
C00037	MTOTBAS	00006			
C00040	MTYPE	00006	00257	00257	00272
C00041	MVULN	00006			
C00042	MNEAPGP	00006			
C00043	MNHOTPE	00006	00324	00325	00336
C00000	MYIDENT	00004			00337
C00044	MZONEPT	00006			
C00045	MZONES	00006	00352	00352	
C11577	NAMCLAS				
C00001	NASMT				

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INITIND

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14

C00003	NBLUPD	C00003
C00002	NC	00127
C00074	NCHKFLG	00462
C00120	NCHKNUM	00460
C00002	NCOL	00154
C01042	NEWIND	
C00000	NI	00125
C00000	NISL	00151
C00003	NITEH	00155
C00074	NLRR	00017
C00001	NN	00153
C00000	NOPRINT	C00001
C00001	NOUT	00114
C00004	NR	00107
C00005	NREDPLD	00006
C00006	NTA	
C00000	NTDEF	00401
C01001	NTINTX	00413
C00000	NULL	00230
C00001	NV	00126
C00002	NVLN	C00002
C00000	NWMD	00006
C00001	NZONES	C00001
C00014	PA	00063
C00000	PG	00061
X00001	Q3Q10040	00143
X00002	Q8001CT.	00146
C00040	QA	00000
C00030	QG	00055
C00004	STATUS	00064
C06662	TANK	
C00003	TARDHI	
C00002	TARDLO	
C00001	TCOL	
C00000	TMASW	00052
P00204	TS00015.	00160
P00217	TS00016.	00211
P00230	TS00017.	00222
P00244	TS00020.	00234
P00257	TS00021.	00247
P00272	TS00022.	00260
P00304	TS00023.	00276
P00324	TS00025.	00314
P00336	TS00026.	00330
P00352	TS00027.	00342
P00364	TS00030.	00356
P00415	TS00033.	00407
P00433	TS00034.	00421
P00455	TS00036.	00445
C00000	TSTAT	
C00005	TVULN	
C00000	TWORO	
C00450	TYPEHAM	00266
C02730	TYPETEL	00270

00072 00073 00170 00173 00176 00201 00425 00430

5.475 INITIND

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ED

0

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15

C07242	VALUE	00141	00162
C07242	WD	00333	00334
C07000	WR	00101	00102
P00015	WS00001	00021	
P00025	WS00002	00027	
P00033	WS00003	00036	
P00042	WS00004	00044	
P00052	WS00005	00055	
P00061	WS00006	00066	
P00072	WS00007	00075	
P00101	WS00010	00103	
P00167	WS00011	00111	
P00120	WS00012	00122	
P00133	WS00013	00135	
P00141	WS00014	00150	
P00163	WS00015	00203	
P00214	WS00016	00216	
P0225	WS00017	00227	
P00237	WS00020	00263	
P00252	WS00021	00256	
P00266	WS00022	00271	
P00301	WS00023	00303	
P00307	WS00024	00311	
P00321	WS00025	00323	
P00333	WS00026	00335	
P00345	WS00027	00351	
P00361	WS00030	00363	
P00367	WS00031	00371	
P00375	WS00032	00400	
P00411	WS00033	00414	
P00424	WS00034	00432	
P00436	WS00035	00440	
P00450	WS00036	00454	
P00460	WS00037	00463	
C00004	X	00163	00164
C00016	XLONG	00006	
C07644	Y	00165	
C17504	Z	00166	
C00010	ZON		
C07470	ZONES	00361	00362

00370 SYMBOLS


```

SUBROUTINE READIN
  CSUBR  READIN  START *****
  CUSE   COMMON: START *****
  CEND   COMMON/COMMUN/END,NZONES,IBREAK *****
  C      COMMON *****
  CUSE   RADATA  START *****
  C      COMMON/RADATA/PG(12),PA(12),QG(R),QA(R) *****
  C      RADATA  START *****
  C      PRINT   START *****
  C      COMMON/PRINT/PRINT(15) *****
  C      PRINT *****
  C      3      HAPR71 *****
  C      COMMON/3/ICUR, ISTORE,COLAR(100), COMPLEX(4000) *****
  C      TYPE INTEGER COLAR, COMPLEX *****
  C      DIMENSION CROIST(100),CVULN(100) *****
  C      TYPE-INTEGER CVULN *****
  C      EQUIVALENCE(CROIST,COMPLEX), (CVULN,COMPLEX(101)) *****
  C      CENO 3 *****
  C      DIMENSION INP(R) *****
  C      3 READ 5, (INP(I), I=1,R) *****
  C      5 FORMAT(1I10) *****
  C      6 DO 10 I=1,8 *****
  C      IF ((INP(I).GT.0).AND.(INP(I).LE.15))7,10 *****
  C      7 NTINO = INP(I) *****
  C      10 CONTINUE *****
  C      GO TO 3 *****
  C      12 CONTINUE *****
  C      READ 99, (PG(I), I=1,R) *****
  C      READ 99, (PA(I), I=1, 12) *****
  C      READ 99, (PA(I), I=1,8) *****
  C      READ 99, (PA(I), I= 9, 12) *****
  C      READ 99, (QG(I), I=1,8) *****
  C      READ 99, (QA(I), I=1,8) *****
  C      READ 6534, CVULN(1), IBREAK *****
  C      6534 FORMAT(10,5) *****
  C      99 *****
  C      6534 *****
  C      END *****

```

5.4TS HEADIN

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

HEADIN

COMMON

RADATA

PRINT

3

EXTERNAL SYMBOLS

THEND.

ORODICT.

TSR.

QNSINGL.

IDENT

00231

00026

00023

00050

00017

10006

PEADIN

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ED

9

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1150

SATS

LEADIN

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P00223	REGIM.	00224	00076	00113	00130	00145	00162	00177	00212	00214	
P00222	CRVHTL.	00040									
C00002	COLAR										
C00146	COMPLFX										
C00146	CRDIST	00046	00220								
P00013	CRFMT.	00213	00034	00045	00372	00104	00107	00121	00124	00136	00141
C01312	CVULN	00030	00034	00045	00372	00104	00107	00121	00124	00136	00141
P00001	UIC1.	00156	00170	00173	00205	00210	00217				
P00225	ENDING.	00031	00220	00223	00224						
P00000	EXIT.	00224									
P00013	FORPAT.										
P00046	GEN000.	00032									
P00105	GEN001.	00070									
P00122	GEN002.	00105									
P00137	GEN.003.	00122									
P00154	GEN0004.	00137									
P00171	GEN0005.	00154									
P00206	GEN0006.	00171									
P00220	GEN0007.	00206									
P00227	I	00037	00041	00042	00052	00052	00075	00077	00101	00112	00114
		00127	00131	00133	00144	00146	00150	00161	00163	00165	00176
		00202									
		00215									
C00002	IMPAK										
C00000	ICUL										
P00057	IF0001.	00031	00046	00054	00057	00062					
P00223	INITIAL.	00042	00065								
P00003	IMP	00064									
C00000	IPENT										
C00001	ISTORE										
P00066	.10	00055	00056	00061							
P00070	.12	00050									
P00032	.3	00067									
P00051	.4	00047									
P00062	.7	00060									
P00013	.5	00035									
P00021	.5534	00211									
P00014	.98	00073									
P00230	MFIND	00063	00110	00125	00142	00157	00174				
C00000	NAM.										
C00001	NZONES										
C00014	PA	00132	00147	00147							
C00000	PG	00100	00115	00115							
X00002	PROTECT.	00000	00027								
C00040	UA	00201	00201								
C00030	UG	00164	00164								
X00004	UNSINGL.	00221									
P00024	WEAULT	00026									
X00001	YMF.	00044									
X00003	YSH.	00033									
P00040	WS00001.	00043									
P00054	WS00002.	00044									
P00076	WS00003.	00102									
P00113	WS00004.	00117									

5.ATS

READIN

P00130 W500005. 00134
P00145 W500006. 00151
P00162 W500007. 00166
P00177 W500010. 00203
00067 SYMBOLS

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```

SIMUL-TIME TOEFSTAT *****
CS/HR TOEFSTI 05AUG71 *****
C      ENTRY TOEFSTAT *****
CUSE   KEY      START *****
COMMON/KEY/KEY(10) *****
EQUIVALENCE(I,J,N,K,KEY(4)),(M,N,KEY(7)),(I,J,M,N,K,KEY
1(9))
C      KEY *****
CEND   *****
C      KEYS *****
CUSE   *****
COMMON/KEYS/KEYS(12) *****
TYPE INTEGER ISTAT,ICOL,TARUL(4),TAR(UNT,ZUN
TYPE INTEGER IVULN *****
EQUIVALENCE(ISTAT,KEYS(1)),
1(ICOL,KEYS(2)),
2(TARUL,KEYS(3)),
3(TARPHI,KEYS(4)),
4(RATTACK,KEYS(5)),
5(TVULN,KEYS(6)),
6(RANGE,KEYS(7)),
7(RTERM,KEYS(8)),
8(ZO,KEYS(9)),
9(RUEFZON,KEYS(10)),
1(RUEFCOP,KEYS(11))
C      KEYS *****
CEND   *****
C      *****
CUSE   *****
1      START *****
COMMON/AT/NISL,ITEM,X(4000),Y(4000),Z(4000),I(4000)
DEFINITION STATUS(12000) *****
EQUIVALENCE(STATUS,X) *****
C      *****
C      NISL = NUMBER OF COLLOCATED ISLANDS *****
C      NM = INDEX TO COLAN *****
C      NCOL = NUMBER OF COLLOCATED TARGETS *****
C      NITEM = NUMBER OF ITEMS IN SEGMENT OF THIS PROCESSOR *****
C      X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE *****
C      I(4) = INDEX NUMBER OF X,Y,Z *****
C      STATUS = PACKED DATA FOR TARGETS *****
C      *****
CEND   *****
CUSE   *****
COMMON/AT/ICOLM,ISTORE,COLAR(100),COMPLEX(4000) *****
TYPE INTEGER COLAN,COMPLEX *****
DEFINITION COUTST(100),COUTK(100) *****
TYPE INTEGER CVULN *****
EQUIVALENCE(COUTST,COMPLEX),(CVULN,COMPLEX(101)) *****
C      *****
C      *****
CEND   *****
C      *****
CUSE   *****
COMMON/AT/NTUFF,ITEM(512),NTIIX(512) *****
C      *****
CEND   *****

```

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```

CUSE 7 START *****
COMMON/7/COLO(12000),COMP(12000)
DIMENSION LTERM(12000)
TYPE LOGICAL COLO,COMP,LTERM
EQUIVALENCE(COMP,LTERM)

C
CEND 7 *****

      ENTRY YDEFST
      MAXDEF = 512
      DO 100 I=1,MAXDEF
        IF (LTERM(I),EQ,0) 200,9
        9 IF (NTINX(I),EQ,0) 196,14
        10 NTINX(I) = LTERM(I)
        IF (COLO(NTINX(I)),EQ,0)
          11 ICUR=LTERM(I)
          CALL FINDIT
          12 NT=IGET(NTA,ICUR,COLO)
          IF (NT,EQ,0) 14,13
          13 ICUR=ICUR+NT
          14 ICUR=ICUR+1
          INDEX=IGET(INDEX,ICUR,COLO)
          IF (INDEX,EQ,LTERM(I)) 95,15
          15 IF (LTERM(INDEX),EQ,0) 30,16
          16 DO 20 J=1,MAXDEF
            IF (INDEX,EQ,LTERM(J)) 22,20
            CONTINUE
          20 PRINT 21, INDEX, LTERM(INDEX)
          21 FORMAT('*** UNABLE TO FIND ENTRY IN ITEM AND NTINX ARRAYS FOR IA
            IDEFI',I5,*, LTERM = ',L17//)
            GO TO 30
          22 NTINX(I) = NTINX(I) + NTINX(J)
          MP = MAXDEF-1
          DO 25 K = J, MP
            LTERM(K) = LTERM(K+1)
          25 NTINX(K) = NTINX(K+1)
          NTINX(MAXDEF) = 0
          LTERM(MAXDEF) = 0
          30 CALL IPUT(KTERM, INDEX,I,STATUS)
          GO TO 12
          95 CONTINUE
          ITH=I
          IF (NTINX(I)) 96,200,97
          96 ITH=NTINX(I)
          97 CONTINUE
          INDEX=LTERM(I)
          CALL IPUT(KTERM, INDEX,ITH,STATUS)
          100 CONTINUE
          200 CONTINUE
          END

```

S.4TS TOEFSTAT

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3

TOEFSTAT

IDENT

PROGRAM LENGTH
ENTRY POINTS

TOEFSTAT
TOEFSTY

00242
00025
00032

BLOCK NAMES

KEY
KEYS
1
3
5
7

00012
00014
37204
10006
02001
01356

EXTERNAL SYMBOLS

Q3009040
Q00EVALL
THEND.
Q000ICT.
FINIT
IGET
IPUT
STM.
Q000074
QNSI0GL.

S.ATS INDEXSTAT

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P00224	REGIN.	00225					
P00223	CONVTT.	00133					
C00002	COLAR	00070	00104				
C00000	COLO	00056					
C00567	COMP						
C00146	COMPLFX						
P00230	COUNT.	00157	00160				
C00146	CRDIST						
P00003	CHFT.	00145					
C00312	CVHLL						
P00001	DICI.	00027	00064	00066	00102	00131	00141
P00226	ENRINC.	00030	00035	00221	00066	00102	00144
P00000	EXIT.	00227			00224		
X00005	FIPTT	00063					
P00003	FORMAT.						
P00145	GG00000.	00127					
P00231	I	00040	00041	00045	00051	00106	00116
C00000	ICUP	00204	00207	00216	00074	00076	00146
C00007	IDLAT	00062	00062	00067			
C00010	IDLONG						
X00006	IGET	00065	00101				
C27344	IMP						
P00232	INDEX	00105	00111	00120	00133	00134	00174
C00005	INMO	00103					00211
P00224	INITIAL.	00030	00035				00214
X00007	IPUT	00172	00212				
C00001	ISTORE						
C00001	ITERM	00042	00042	00052	00052	00061	00106
		00161	00162	00171	00210	00210	00107
		00200	00206	00215			00121
P00233	ITM	00050					00122
P00051	.10						00101
P00216	.100						
P00060	.11	00057					
P00065	.12	00176					
P00074	.13	00077					
P00077	.14	00073					
P00111	.15	00107					
P00116	.16	00114					
P00124	.20	00122					
P00221	.200	00043					
P00146	.22	00123	00044	00202			
P00163	.25						
P00172	.30	00115	00145				
P00045	.9	00044					
P00177	.95	00057	00110				
P00204	.96	00047	00050	00202			
P00207	.97	00203					
P00003	.21	00132					
P00142	.Z00001.	00137					
P00234	J	00117	00121	00124	00150	00154	00156
P00235	K	00155	00157				
C00006	KAMDEF						
C00004	KATTACK						

5.415 IDDEFSTAT

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C03012 KDFECMP
C00011 KDFEZZON
C00000 KEY
C00000 KEYS
C00007 KTFM
C00567 LTRM
P00236 MAXDEF
P00237 M
C00002 PCOL
C00000 PISL
C00003 VTFM
C00001 W
P00240 NT
C00006 NTA
C00000 NIDEF
P00241 NIDEX
C01001 NITLTX
X00001 03000040
X00004 00000000
X00011 00000004
X00002 00000000
X00012 00000000
C00004 STATUS
X00010 STM
C00003 T00001
C00002 T00000
C00001 T00000
P00025 T00000
P00032 T00000
X00003 T00000
P00217 T00000
P00125 T00000
P00166 T00000
C00000 T00000
C00005 T00000
P00041 T00000
P00120 T00000
P00161 T00000
C00004 X
C07004 Y
C17504 Z
C00010 700
00136 SY-ROUS

00174 00214
00113 00136
00037 00125
00154 00155

00071 00075
00067

00053 00054
00044 00045
00170 00201
00055 00112
00000 00024
00140
00135
00222
00175 00215
00130

00167

00164 00163

00152 00153

00151

00147 00151
00205 00205

00147 00147
00201 00201
00033

00220 00220
00124 00124

00165

1157

```

FUNCTION VLRAL(YIELD,VA,NOB,PA)
  CS/HR  VLR=0  N=ANG71 *****
  CUSE  NADATA  START *****
  C      CCONV(NADATA)/PC(12),PA(12),GR(b)*GA(N) *****
  CEND  NADATA *****

  100  DFCOE (4,100,VM) VMLF(TE),K
  100  FCOEF (F2,0,0,1,0)
  100  COV=VTELE**33333
  IF (PP) 1,1,2
  1 DELTA=0.
  IF (LFTER .EQ. MGO ) 19,9
  2 A=0.27144 * XN/CNY
  3 A=1.01 * XN
  IF (LFTER .EQ. MGO ) 15,5
  4 CAS=
  5 X=2.
  6 Z=(X*X+M)/(2.0-A)
  7 IF (A*SEF(X-Z) .LT. .0605) 9,7
  7 X=Z  GO TO 6
  8 Z=(Z-1.)/(Z+1.)
  DELTA=(21.7991 + 9.1975*Z)/MZ*HZ
  9 AVM=DELTA*VN
  10 A=1  SP=0.  GO TO 23
  10 CAS=
  15 X=1.
  15 Z=(2.0*X*X+M)/(3.0*X-X-0)
  17 IF (A*SEF(X-Z) .LT. .0003) 18,17
  17 X=Z  GO TO 15
  18 Z=(Z-1.)/(Z+1.)
  DELTA=(15.7493*Z-0.4447)/MZ*HZ
  19 AVM=DELTA*VN
  20 A=2  SP=3.
  23 IF (MGO) 24,24,25
  24 JS=1  GO TO 26
  25 JS=2
  26 NO 27 1=2,12
  27 CONTINUE
  1=12
  28 I=1  N1=I-1
  28 D=AVM-S*(N1-1)
  28 GO TO (24,27),IS
  29 GO TO (30,31),JS
  30 Y=0.5*(N1)  Z=MG(IUP)  GO TO 34
  31 Y=0.5*(N1)  Z=PA(IUP)  GO TO 34
  32 GO TO (33,34),JS
  33 Y=0.5*(N1)  Z=MG(IUP)  GO TO 35
  34 Y=0.5*(N1)  Z=PA(IUP)
  35 S=(Y-Z)*2
  35 Y=Y-S*Y
  35 VLR=VLR + EXP(Y) * CNY
  END

```

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5.ATS VLMADI

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES
EXTERNAL SYMBOLS

VLMADI
MAUATA
THEAD.
Q2G0711
QADICT.
EAPP
DEC.
QMSIUGL.

IDENT

00374
00012
00050

VLMADI

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P03350 A
 P03351 AVN
 P03352 R
 P03353 REGIN.
 P03354 CREDIT.
 P03355 CMY
 P03356 DEC.
 P03357 HELIA
 P03358 UICL
 P03359 IV
 P03360 ENDING.
 P03361 EXIT.
 P03362 EXPF
 P03363 FN
 P03364 FORWAT.
 P03365 FPO0001.
 P03366 FPO0002.
 P03367 FPO0003.
 P03368 FPO0004.
 P03369 FPO0005.
 P03370 GETPL.
 P03371 GETPL.
 P03372 GGO0000.
 P03373 HQH
 P03374 I
 P03375 IGOTO.
 P03376 IL
 P03377 INITIAL.
 P03378 ISV
 P03379 IUP
 P03380 1
 P03381 15
 P03382 16
 P03383 17
 P03384 18
 P03385 19
 P03386 2
 P03387 23
 P03388 24
 P03389 25
 P03390 26
 P03391 27
 P03392 28
 P03393 30
 P03394 31
 P03395 32
 P03396 33
 P03397 34
 P03398 35
 P03399 5
 P03400 6
 P03401 7

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 00312
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 00301
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 00015
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 00162
 00201
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 00212
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 00174
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 00320
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 00255
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 00224
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 00220
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5.ATS

VLADI

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P00072 .R 00067
 P00102 .9 00063
 P00324 .EASEM. 00057
 P00003 ..100 00117
 P00010 ..100000 00021
 P00011 ..100001 00042
 P00363 JSW 00051
 P00364 LETTER 00150
 P00003 RVN 00025
 C00014 PA 00021
 P00270 PF00002. 00214
 P00273 PF00003. 00216
 P00277 PF00004. 00217
 P00305 PF00005. 00211
 C00000 PG 00204
 X00002 02007111 00031
 X00003 00000000 00013
 C00040 QA 00233
 C00030 OG 00225
 X00006 00000000 00252
 P00365 HZ 00074
 P00366 S 00242
 X00001 THEM0. 00027
 P00251 VALUE. 00311
 P00012 VLK01 00012
 P00367 VN 00023
 P00155 #S00001. 00165
 P00370 X 00054
 P00371 XK 00114
 P00372 Y 00120
 P00003 YFLN 00024
 P00373 ? 00207
 00062 00033
 00220 00062
 0012A SYMBOLS

00061 00061 00062 00064 00073 00075 00075 00076 00114 00116
 00117 00121 00130 00132 00132 00133 00161 00175
 00152 00202 00221
 00042 00051
 00214 00216 00217
 00204 00210 00211
 00013 00235 00236
 00225 00227 00230
 00077 00100 00101 00133 00134 00135 00136
 00242
 00311
 00103 00140
 00055 00056 00060 00063 00071 00110 00112 00113 00115
 00120 00126 00045 00047
 00215 00226 00234 00240 00243 00244
 00063 00070 00072 00074 00120 00125 00127 00131 00212
 00231 00237 00241

```

SUBROUTINE WHPNT
  CSURR      WHPNT      15JAN71
  CUSE      KEYS      START
  COMMON/KEYS/KEYS(12)
  TYPE INTEGER ISTAT,TCOL,TARDLO,TARDHI,ZON
  TYPE INTEGER TVULN
  EQUIVALENCE ( ISTAT,KEYS(1)),
    (TCOL,KEYS(2)),
    (TARDLO,KEYS(3)),
    (TARDHI,KEYS(4)),
    (KATTACK,KEYS(5)),
    (TVULN,KEYS(6)),
    (KARDEF,KEYS(7)),
    (KTERF,KEYS(8)),
    (ZON,KEYS(9)),
    (KDEFZON,KEYS(10)),
    (KDEFZON,KEYS(11))
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TYPE INTEGER INDEXNO
EQUIVALENCE(MPERSON,VALUE( 23))
TYPE INTEGER MPERSON
EQUIVALENCE(MPSITE,VALUE( 24))
TYPE INTEGER MPSITE
EQUIVALENCE(MOALERT,VALUE( 25))
TYPE INTEGER MOALERT
EQUIVALENCE(MOINCON,VALUE( 26))
TYPE INTEGER MOINCON
EQUIVALENCE(LINK,VALUE( 27))
TYPE INTEGER LINK
EQUIVALENCE(ZONE,VALUE( 28))
TYPE INTEGER ZONE
EQUIVALENCE(AREA,VALUE( 29))
TYPE REAL AREA
EQUIVALENCE(LAT,VALUE( 30))
TYPE REAL LAT
EQUIVALENCE(LONG,VALUE( 31))
TYPE REAL LONG
EQUIVALENCE(LEGNO,VALUE( 32))
TYPE INTEGER LEGNO
EQUIVALENCE(MESERVE,VALUE( 33))
TYPE INTEGER MESERVE
EQUIVALENCE(ORLEGNO,VALUE( 34))
TYPE INTEGER ORLEGNO
EQUIVALENCE(NEXTZONE,VALUE( 35))
TYPE INTEGER NEXTZONE
EQUIVALENCE(POINT,VALUE( 36))
TYPE INTEGER POINT
EQUIVALENCE(DATEIN,VALUE( 37))
TYPE REAL DATEIN
EQUIVALENCE(DATEOUT,VALUE( 38))
TYPE REAL DATEOUT
EQUIVALENCE(POP,VALUE( 39))
TYPE REAL POP
EQUIVALENCE(IGIN,VALUE( 40))
TYPE INTEGER IGIN
EQUIVALENCE(MVA,VALUE( 41))
TYPE INTEGER MVA
EQUIVALENCE(MANUS,VALUE( 42))
TYPE REAL MANUS
EQUIVALENCE(VAL,VALUE( 43))
TYPE REAL VAL
EQUIVALENCE(VALU,VALUE( 44))
TYPE REAL VALU
EQUIVALENCE(MISDEF,VALUE( 45))
TYPE INTEGER MISDEF
EQUIVALENCE(IARDEF,VALUE( 46))
TYPE INTEGER IARDEF
EQUIVALENCE(TARDEFHI,VALUE( 47))
TYPE INTEGER TARDEFHI
EQUIVALENCE(TARDEFLO,VALUE( 48))
TYPE INTEGER TARDEFLO
EQUIVALENCE(ICLASS,VALUE( 49))
TYPE INTEGER ICLASS
EQUIVALENCE(ITYPE,VALUE( 50))

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TYPE INTEGER ITYPF +VALUE(51))
EQUIVALENCE(IMEG
TYPE INTEGER IREG +VALUE(52))
EQUIVALENCE(IMEFUL +VALUE(53))
TYPE INTEGER IREFUL
EQUIVALENCE(IOTSH +VALUE(54))
TYPE INTEGER IOTHER
EQUIVALENCE(IGROUP +VALUE(55))
TYPE INTEGER IGROUP
EQUIVALENCE(ICOMPLEX +VALUE(56))
TYPE INTEGER ICOMPLEX
EQUIVALENCE(ITGT +VALUE(57))
TYPE INTEGER ITGT
EQUIVALENCE(JTYPE +VALUE(58))
TYPE INTEGER JTYPE
EQUIVALENCE(WHOTOPE +VALUE(59))
TYPE INTEGER WHOTOPE
EQUIVALENCE(AS +VALUE(60))
TYPE INTEGER AS +VALUE(61))
EQUIVALENCE(INDECOYS
TYPE INTEGER INDECOYS
EQUIVALENCE(FFRAC +VALUE(62))
TYPE REAL FFRAC
EQUIVALENCE(DELTA +VALUE(63))
TYPE REAL DELTA
EQUIVALENCE(FVALH1 +VALUE(64))
TYPE REAL FVALH1
EQUIVALENCE(I1 +VALUE(65))
TYPE REAL I1
EQUIVALENCE(I2 +VALUE(66))
TYPE REAL I2
EQUIVALENCE(I3 +VALUE(67))
TYPE REAL I3
EQUIVALENCE(FVALT1 +VALUE(68))
TYPE REAL FVALT1
EQUIVALENCE(FVALT2 +VALUE(69))
TYPE REAL FVALT2
EQUIVALENCE(MINKILL +VALUE(70))
TYPE REAL MINKILL
EQUIVALENCE(MAXKILL +VALUE(71))
TYPE REAL MAXKILL
EQUIVALENCE(MAXFRACV +VALUE(72))
TYPE REAL MAXFRACV
EQUIVALENCE(MAXFACTV +VALUE(73))
TYPE REAL MAXFACTV
EQUIVALENCE(YIELD +VALUE(74))
TYPE REAL YIELD
EQUIVALENCE(NOMOMH1 +VALUE(75))
TYPE INTEGER NOMOMH1
EQUIVALENCE(NOMOMH2 +VALUE(76))
TYPE INTEGER NOMOMH2
EQUIVALENCE(NASMS +VALUE(77))
TYPE INTEGER NASMS
EQUIVALENCE(NC4 +VALUE(78))
TYPE INTEGER NC4
EQUIVALENCE(PAYLOAD +VALUE(79))

TYPE INTEGER PAYLOAD
 EQUIVALENCE(IHEP ,VALUE(79))
 TYPE INTEGER IHEP
 EQUIVALENCE(PHID ,VALUE(80))
 TYPE REAL PHID
 EQUIVALENCE(CEP ,VALUE(81))
 TYPE REAL CEP
 EQUIVALENCE(RANGE ,VALUE(82))
 TYPE REAL RANGE
 EQUIVALENCE(RANGEDEC,VALUE(83))
 TYPE REAL RANGEDEC
 EQUIVALENCE(RANGERE,VALUE(84))
 TYPE REAL RANGERE
 EQUIVALENCE(SPEED ,VALUE(85))
 TYPE REAL SPEED
 EQUIVALENCE(SPHLO ,VALUE(86))
 TYPE REAL SPHLO
 EQUIVALENCE(SPDASH ,VALUE(87))
 TYPE REAL SPDASH
 EQUIVALENCE(MEL ,VALUE(88))
 TYPE REAL MEL
 EQUIVALENCE(PFN ,VALUE(89))
 TYPE REAL PFN
 EQUIVALENCE(ALERTRPL,VALUE(90))
 TYPE REAL ALERTRPL
 EQUIVALENCE(NALETRDL,VALUE(91))
 TYPE REAL NALETRDL
 EQUIVALENCE(ALERTRLY,VALUE(92))
 TYPE REAL ALERTRLY
 EQUIVALENCE(NALETRLY,VALUE(93))
 TYPE REAL NALETRLY
 EQUIVALENCE(CCMEL ,VALUE(94))
 TYPE REAL CCMEL
 EQUIVALENCE(TTOS ,VALUE(95))
 TYPE REAL TTOS
 EQUIVALENCE(TMDEL ,VALUE(96))
 TYPE REAL TMDEL
 EQUIVALENCE(TVUL ,VALUE(97))
 TYPE REAL TVUL
 EQUIVALENCE(TMETARG ,VALUE(98))
 TYPE REAL TMETARG
 EQUIVALENCE(PLART ,VALUE(99))
 TYPE REAL PLART
 EQUIVALENCE(A-RATE ,VALUE(100))
 TYPE REAL A-RATE
 EQUIVALENCE(PHABT ,VALUE(101))
 TYPE REAL PHABT
 EQUIVALENCE(PINC ,VALUE(102))
 TYPE REAL PINC
 EQUIVALENCE(PDES ,VALUE(103))
 TYPE REAL PDES
 EQUIVALENCE(PFPF ,VALUE(104))
 TYPE REAL PFPF
 EQUIVALENCE(PH-1S ,VALUE(105))
 TYPE REAL PH-1S
 EQUIVALENCE(ATTLEF ,VALUE(106))

TYPE REAL ATTRLEF
 EQUIVALENCE (ATTRCORR,VALUE (107))
 TYPE REAL ATTRCORP
 EQUIVALENCE (KORSTYLE,VALUE (108))
 TYPE INTEGER KRESTYLE
 EQUIVALENCE (KORPANGE,VALUE (109))
 TYPE REAL KPERANGE
 EQUIVALENCE (KILCATTR,VALUE (110))
 TYPE REAL KILCATTR
 EQUIVALENCE (ATTRSHIP,VALUE (111))
 TYPE REAL ATTRSUPP
 EQUIVALENCE (INTYPE2, VALUE (112))
 TYPE INTEGER I-TYPE2
 EQUIVALENCE (EFFECTIFS,VALUE (113))
 TYPE REAL EFFECTIFS
 EQUIVALENCE (CINTA, VALUE (114))
 TYPE INTEGER CINTA
 EQUIVALENCE (CIVOLA, VALUE (115))
 TYPE INTEGER CIVOLA
 EQUIVALENCE (MADBLT, VALUE (116))
 TYPE REAL MADBLT
 EQUIVALENCE (MADBLK, VALUE (117))
 TYPE REAL MADBLK
 EQUIVALENCE (ADBLT, VALUE (118))
 TYPE REAL ADBLT
 EQUIVALENCE (MAREAREC,VALUE (119))
 TYPE INTEGER MAREAREC
 EQUIVALENCE (MAREDS, VALUE (120))
 TYPE INTEGER MAREDS
 EQUIVALENCE (MINTAT, VALUE (121))
 TYPE INTEGER MINTAT
 EQUIVALENCE (ADBLK, VALUE (122))
 TYPE REAL ADBLK
 EQUIVALENCE (TIMEN, VALUE (123))
 TYPE REAL TIMEN
 EQUIVALENCE (TIME, VALUE (124))
 TYPE REAL TIME
 EQUIVALENCE (UFLAY, VALUE (125))
 TYPE REAL UFLAY
 EQUIVALENCE (IPLCMT, VALUE (126))
 TYPE INTEGER IPLCMT
 EQUIVALENCE (INTYPE, VALUE (127))
 TYPE INTEGER INTYPE
 EQUIVALENCE (CINTV, VALUE (128))
 TYPE INTEGER CINTV
 EQUIVALENCE (CINTA, VALUE (129))
 TYPE INTEGER CINTA
 EQUIVALENCE (EVENT, VALUE (130))
 TYPE INTEGER EVENT
 EQUIVALENCE (EVENTA, VALUE (131))
 TYPE INTEGER EVENTA
 EQUIVALENCE (PLACE, VALUE (132))
 TYPE INTEGER PLACE
 EQUIVALENCE (PLACEN, VALUE (133))
 TYPE INTEGER PLACEN
 EQUIVALENCE (CINTA, VALUE (134))

TYPE INTEGER TALT *VALUE (135)
 EQUIVALENCE (IMPNS
 TYPE INTEGER IMPNS *VALUE (136)
 EQUIVALENCE (INTAB
 TYPE INTEGER INTAB *VALUE (137)
 EQUIVALENCE (IMCODE
 TYPE INTEGER IMCODE *VALUE (138)
 EQUIVALENCE (ICONE
 TYPE INTEGER ICONE *VALUE (139)
 EQUIVALENCE (HCODE
 TYPE INTEGER HCODE *VALUE (140)
 EQUIVALENCE (IDID
 TYPE INTEGER IDID *VALUE (141)
 EQUIVALENCE (AGX
 TYPE INTEGER AGX *VALUE (142)
 EQUIVALENCE (AGY
 TYPE INTEGER AGY *VALUE (143)
 EQUIVALENCE (OHX
 TYPE INTEGER OHX *VALUE (144)
 EQUIVALENCE (UGY
 TYPE INTEGER UGY *VALUE (145)
 EQUIVALENCE (AHOB
 TYPE INTEGER AHOB *VALUE (146)
 EQUIVALENCE (IDOH
 TYPE INTEGER IDOH *VALUE (147)
 EQUIVALENCE (IMHTYPFN,VALUE (147)
 TYPE INTEGER IMHTYPFN
 EQUIVALENCE (PRIMETAR,VALUE (148)
 TYPE INTEGER PRIMETAR
 EQUIVALENCE (ICLASST *VALUE (149)
 TYPE INTEGER ICLASST
 EQUIVALENCE (ITYPEI *VALUE (150)
 TYPE INTEGER ITYPEI
 EQUIVALENCE (JTYPEI *VALUE (151)
 TYPE INTEGER JTYPEI
 EQUIVALENCE (ITYPEI *VALUE (152)
 TYPE INTEGER ITYPEI
 EQUIVALENCE (ICLASST *VALUE (153)
 TYPE INTEGER ICLASST
 EQUIVALENCE (CTTYOINT,VALUE (154)
 TYPE INTEGER CTTYOINT
 EQUIVALENCE (CTTYLOCT,VALUE (155)
 TYPE INTEGER CTTYLOCT
 EQUIVALENCE (IPENMODE,VALUE (156)
 TYPE INTEGER IPENMODE
 EQUIVALENCE (IRECMODE,VALUE (157)
 TYPE INTEGER IRECONE
 EQUIVALENCE (IATTACK *VALUE (158)
 TYPE INTEGER IATTACK
 EQUIVALENCE (NAL *VALUE (159)
 TYPE INTEGER NAL
 EQUIVALENCE (ITAM *VALUE (160)
 TYPE INTEGER ITAM
 EQUIVALENCE (IMHOS *VALUE (161)
 TYPE INTEGER IMHOS
 EQUIVALENCE (MPEN *VALUE (162)
 TYPE INTEGER MPEN

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TYPE INTEGER NPEN
EQUIVALENCE(MOET, VALUE( 163))
TYPE INTEGER MOET
EQUIVALENCE(PARRIVE, VALUE( 164))
TYPE REAL PARRIVE
EQUIVALENCE(ADEFZON, VALUE( 165))
TYPE INTEGER ADEFZON
EQUIVALENCE(ADEFCHP, VALUE( 166))
TYPE INTEGER ADEFCHP
EQUIVALENCE(MAINT, VALUE( 167))
TYPE INTEGER MAINT
EQUIVALENCE(AZON1, VALUE( 168))
TYPE INTEGER AZON1
EQUIVALENCE(AZON2, VALUE( 169))
TYPE INTEGER AZON2
EQUIVALENCE(AZON3, VALUE( 170))
TYPE INTEGER AZON3
EQUIVALENCE(CPACTY, VALUE( 171))
TYPE INTEGER CPACTY
EQUIVALENCE(ICORR, VALUE( 172))
TYPE INTEGER ICORR
EQUIVALENCE(IMIRV, VALUE( 173))
TYPE INTEGER IMIRV
EQUIVALENCE(IDHL, VALUE( 174))
TYPE INTEGER IDHL
EQUIVALENCE(PKNAV, VALUE( 175))
TYPE REAL PKNAV
EQUIVALENCE(ITIME, VALUE( 176))
TYPE INTEGER ITIME
EQUIVALENCE(PSAS, VALUE( 177))
TYPE REAL PSAS
EQUIVALENCE(TPAS, VALUE( 178))
TYPE REAL TPAS
EQUIVALENCE(TGTSTAT, VALUE( 179))
TYPE INTEGER TGTSTAT
EQUIVALENCE(FLAG, VALUE( 180))
TYPE INTEGER FLAG
EQUIVALENCE(NOPERSQ1, VALUE( 181))
TYPE INTEGER NOPERSQ1
EQUIVALENCE(NOPERSQ2, VALUE( 182))
TYPE INTEGER NOPERSQ2
EQUIVALENCE(NOPERSQ3, VALUE( 183))
TYPE INTEGER NOPERSQ3
EQUIVALENCE(NUMDBL, VALUE( 184))
TYPE INTEGER NUMDBL
EQUIVALENCE(EFECNES1, VALUE( 185))
TYPE REAL EFECNES1
EQUIVALENCE(EFECNES2, VALUE( 186))
TYPE REAL EFECNES2
EQUIVALENCE(VAL1, VALUE( 187))
TYPE REAL VAL1
EQUIVALENCE(VAL2, VALUE( 188))
TYPE REAL VAL2
EQUIVALENCE(TYPE1, VALUE( 189))
TYPE INTEGER TYPE1
EQUIVALENCE(TYPE2, VALUE( 190))

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TYPE INTERP TYPE2
IF (IPRNT(4)) 404, 489
408 CONTINUE
IF (IPRNT(10)) 2005, 405
2005 CONTINUE
PRINT 401
401 FORMAT(10H1 ITERM,10H NTERM//)
DO 404 I = 1, 512
IF (ITERM(I)) 404, 404, 402
402 PRINT 403, I, ITERM(I), NINTX(I)
403 FORMAT(1X,13,16,110)
404 CONTINUE
405 CONTINUE
PRINT 410
410 FORMAT(18H1 MISSILE TYPE DATA//
110H TYPE,10H PINC,10H PLANT,
210H ROES,10H PFPF,10H TVUL,
310H TRETARG,10H IREP,
410H CEP,10H PKMIS,10H DELTA, 10H FUNCTION//)
MCUMNO(1)
PRINT 412, (TYPE,NAME(I), (PMIS(I,J), J=1,11), I = 1, M)
412 FORMAT(2X,AR, 6F10.5, 110.3F10.5, 2X,AR)
PRINT 414
414 FORMAT(17H1 BOMBER TYPE DATA//10H TYPE,
110H PLANT,10H TMDEL,
210H ABRATE,10H PRART,
410H CEP,10H DELTA,10H FUNCTION //)
MCUMNO(2)=M
DO 420 I=1,N
L=1*M
PRINT 419, TYPE,NAME(L), (HOM(I,J), J = 1, 7)
419 FORMAT(2X,AR,6F10.6, 2X,AR)
420 CONTINUE
PRINT 422
422 FORMAT(17H1 TARKER TYPE DATA// 10H TYPE, 10H PLANT,
*10H TMDEL,10H ABRATE,10H DELTA//)
MCUMNO(3)=CUMNO(2)
DO 425 I=1,M
L=I*CUMNO(2)
PRINT 424, TYPE,NAME(L), (TARK(I,J), J = 1, 5)
424 FORMAT( 2X, AR, 6F10.6,AB)
425 CONTINUE
PRINT 430
430 FORMAT(14H1 ASM TYPE DATA//10H ASMTYPE,10H PLANT,
110H CEP//)
PRINT 432, (I,ASMT(I,1),ASMT(I,2),I=1,NASMT)
432 FORMAT((110,2F10.6//))
PRINT 435
435 FORMAT(18H1 WAREHEAD TYPE DATA//10H WHDTYPE,10H PDJD,
110H YIELD,10H CFP//)
PRINT 437, (I,WMH(I,1),WMH(I,2),WMH(I,3),I=1,NWMH)
437 FORMAT((110,F10.6,F10.3,F10.4//)
1X,LI=1)
PRINT 440
440 FORMAT(10H1 ZONE DATA//10H ZONE,10H AREA,10H CCROT,
110H INCPOT//)

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PRINT 441,(I,(ZONES(I,J),J=1,3,I=1,NZONES)
441 FORMAT(110,3F10.4)
PRINT 445
445 FORMAT(10H1CAPACITY////10X,5HDEFCC//10H TYPE,10H EFFECTNES//)
J=1
446 MTECUMNO(J+2)
MECUMNO(J+3)=MT
DO 450 I=1,M
L=I+1
PRINT 447,TYPE,M(L),CAPACITY(I,J)
447 FORMAT(2X,40F10.4)
450 CONTINUE
IF (J.EQ.2) 455,451
451 PRINT 452
452 FORMAT(///10X,7HINCO10P//10H TYPE,10H EFFECTNES//)
J=2
GO TO 446
455 CONTINUE
2006 CONTINUE
PRINT 453
453 FORMAT(13H1PAYLOAD DATA//10X,10H 1000MB1,10H WMDTYPE,
110H 1000MB1,10H NAMEDEC,10H SIDE//)
M=RLUPLD
ISIDE=1
MSIDE=4MBLUE
PRINT 481,(I,IRV(I,ISIDE),IWDTYPE(I,ISIDE),INMHDS(I,ISIDE),
110HDCVS(I,ISIDE),INAPDEC(I,ISIDE),MSIDE,I=1,N)
481 FORMAT(410,2X,4H)
GO TO (482,483) ISIDE
482 N=NDENPLD
ISIDE=2
MSIDE=3MBRED
GO TO 489
483 CONTINUE
PRINT 484
484 FORMAT(31H1TIME DEPENDENT ORL DATA TABLES///30H ORL TIME TPAS
1H PSASW)
DO 485 I=1, IORLMAX
485 PRINT 486, I, (J, TRASH(J,I), ORLAS(J,I), J=1, IIMAX)
486 FORMAT(240,2(12,3X),F10.5,2X,F7.5/(7X,12,3X,F10.5,2X,F7.5))
489 IF (IPKAT(6)) 460, 465
460 CONTINUE
PRINT 490
490 FORMAT(24H1HAZARD AND 20H TYPE DATA///)
PRINT 491,(I,INVE=PLD(I),I=1,20)
491 FORMAT(2H Z=110,2X,13H INVEPLAP(Z)=,016)
PRINT 492,(I,PLRH(I),I=1,20)
492 FORMAT(2H Z=110,2X,9H PLRH(Z)=,116)
PRINT 493,(I,J,AIN(I,J),J=1,3,I=1,20)
493 FORMAT(2H Z=110,2X,3H C=110,2X,11H A14(I,Z,C)=,110)
PRINT 461
461 FORMAT(11H)
1461 FORMAT(2H INCO=K0,2X,14H STATUS 46H ZONE,
14H ANDFCC46, 2H ANDFZ04, 4H ITEM=46H IANDEF,
24H IVILA, 2H IATTACK, 2H IANDEF1, 2H IANDEFLO,
35H TCOL, 6H IKEEP, 6H TSTAL, //)

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11/26/71

1452 FORMAT(1A,3X, 10, 16, 4A, 21X, 15, 216)

M = 0

PRINT 1461

DO 1463 N = 1, MAX(N)

NL60(1) = IGET(ZONE, N, STATUS)

NL60(2) = IGET(NDEFCON, N, STATUS)

NL60(3) = IGET(KDEFZON, N, STATUS)

NL60(4) = IGET(KDEFN, N, STATUS)

NL60(5) = IGET(KNOOFF, N, STATUS)

NL60(6) = IGET(TWIN, N, STATUS)

NL60(7) = IGET(KATTACK, N, STATUS)

NL60(8) = IGET(TACDEF, N, STATUS)

NL60(9) = IGET(TACLOC, N, STATUS)

NL60(10) = IGET(TCOL, N, STATUS)

NL60(11) = IGET(TSTAT, N, STATUS)

IF NL60(11) .NE. 0 GO TO 1466

NL60(11) = 1

NL60(12) = 1

GO TO 1467

1466 NL60(11) = 0

NL60(12) = 0

1467 PRINT 1462, N, STATUS(N), NL60(1), NL60(12)

M = M + 1

IF (M .GE. 50) GO TO 1463

M = 0

PRINT 1461

PRINT 1461

1463 CONTINUE

445 CONTINUE

END

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IOENT WRPNT

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

KEYS	00014
COMMON	00003
AREADAT	00144
IFIPNT	00012
ITP	00001
MAX	00050
MYIOENT	00001
NAVALIN	00312
NOPWINT	00001
PRAT	00017
TRANS	00006
TWOPH	00001
1	37204
3	10006
4	11616
5	02001
PROCESS	01173
EDITARM	00001
EDITAPE	00016

EXTERNAL SYMBOLS

THEND.
DESCRIPT.
IGET
STM.
UNSEGL.

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C00312 ARPAIE
 C00334 ADALI
 C00340 ADHLE
 C00414 ADEFCMP
 C00413 ADEFFON
 C00363 AGX
 C00364 AGY
 C00367 AHOB
 C00008 AINT
 C00300 ALEAFIBL
 C00302 ALEAFOLY
 C00203 AREA
 C00172 ASMT
 C00241 ASWTYPE
 C00321 ATTCCORR
 C00320 ATTLEG
 C00325 ATTNSUPF
 C00416 AZON1
 C00417 AZON2
 C00420 AZON3
 C00361 HCOOE
 P01762 HEGIN.
 C00161 HENO
 C00210 HLEFNO
 C00602 ROM
 C00020 RTYPES
 C10031 CAPACTY
 C00166 CATCODE
 C00304 CCEEL
 C00267 CEP
 C00147 CLASS
 C00377 CLASSI
 C00153 CNTRYLOC
 C00152 CNTRYCWA
 C00401 CNTRYCCT
 C00400 CNTRYCNT
 P01656 CNVHTL.

 C00360 CODE
 C00002 COLAR
 C00146 COMPLEX
 C00421 CPACTY
 C00146 CROIST
 P00003 CRFMY.

 C00001 CUMNO

 C00312 CVULN
 C00213 DATEIN
 C00214 DATEOUT
 C00144 DELASW

01453 01454

01062 01063 01064

01763

00763 00763

01220 01220

00861 00863 00864 00713 00721 00756 00764 01022 01030 01061 01063
 01064 01112 01114 01115 01116 01146 01153 01216 01221 01270 01272
 01275 01276 01301 01302 01304 01343 01350 01352 01353 01406 01410
 01426 01430 01451 01452 01454 01611 01613 01621

00644 00657 00700 00733 00741 00772 01004 01036 01050 01073 01101
 01125 01135 01165 01173 01224 01240 01252 01313 01332 01366 01376
 01416 01436 01465 01473 01473 01473 01473
 00700 00700 00741 00741 01304 01004 01005 01013 01013 01177 01177
 01201 01201

01353

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CO1133 DEF
CO0323 DEFANG
CO0343 DELAY
CO0244 DELTA
CO0171 DESIG
CO0365 NGX
CO0366 NGY
CO0370 DMG
PO0001 DICI.

00632 00642 00645 00656 00666 00674 00677 00704 00732 00735 00740
00753 00771 01000 01003 01017 01035 01044 01047 01052 01072 01075
01106 01103 01124 01131 01134 01137 01164 01167 01172 01213 01223
01234 01237 01246 01251 01261 01312 01326 01331 01340 01361 01372
01375 01400 01415 01420 01435 01440 01464 01467 01472 01477 01502
01504 01513 01520 01525 01532 01537 01544 01551 01556 01563 01576
01604 01624 01637 01642 01645 01650

CO0437 EPLCFSI
CO0440 EFFCRES
CO0327 EFFECTS
PO1744 ENDING.

00634 01654 01762 01763

01765

CO0350 EVENT
PO0000 EXIT.
CO0243 FFRAC
CO0432 FLAG

00720 00720
01256 01322

CO0160 FLTR
CO1042 FMIS
PO0003 FMT-AT.
CO0154 FUNCTION

CO0245 FVALM
CO0251 FVALTI
CO0252 FVALTY

00640

PO0646 GG00000.
PO0667 GG00001.
PO0700 GG00002.
PO0733 GG00003.
PO0741 GG00004.
PO0772 GG00005.
PO1004 GG00006.
PO1036 GG00007.
PO1050 GG00010.
PO1073 GG00011.
PO1101 GG00012.
PO1125 GG00013.
PO1135 GG00014.
PO1165 GG00015.
PO1173 GG00016.
PO1224 GG00017.
PO1240 GG00020.
PO1252 GG00021.
PO1313 GG00022.
PO1332 GG00023.
PO1362 GG00024.
PO1376 GG00025.
PO1416 GG00026.

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P01436 GG00027.
P01465 GG00030.
P01473 GG00031.
P01503 GG00032.
P01527 GG00033.
P01543 GG00034.
P01651 GG00035.
C00163 H1
C00164 H2
C00324 HILQATTR
P01774 I

01416

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01007

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C00344 IALERT
C00354 IALT
C00224 IARDEF
C00404 IATTACK
C05602 IR04
C00002 IRWEAK
C10175 ICWK
C00227 ICLASS
C00373 ICLASS
C00235 ICMPLEX
C00422 ICORP
C00000 ICUE
C00424 ICWL
C00311 ICW MAX
C00362 ICW
C00000 IFYPWST
X00003 IGT
C00216 IGI
P01775 IGT0.
C00234 IGR0UP
C00423 IMI2V
P01657 IM00002.
P01669 IM00004.
P01661 IM00005.
P01662 IM00007.
P01663 IM00010.
P01664 IM00011.
P01665 IM00012.
P01666 IM00013.
P01667 IM00014.
C11457 IM00015.
C21344 IM0.
C00056 IM00016.
C00037 IM00017.
C00210 IM00018.
C11337 IM00019.
C00174 IM00020.
C00344 IM00021.
C00003 IM00022.

01364

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01505

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01012

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P01762	INITIAL.	00633	
C05347	INTAR		
C00000	INTP	01276	
C11173	IMMOS		
C02233	LOTHER	01407	01410
C00120	LOVEHCP		
C00402	IPENCODE		
C00212	IPONT	00634	00636 01366 01344
C00000	IPST		
C00403	IRECODE		
C00232	IRFUEL		
C00231	IREG		
C00245	IREP		
P01776	ISIDE	01254	01313 01320 01751
C00330	ISITE		
C00001	ISTOUE		
C00000	ISATEAM		
C00662	ITAK		
C00001	ITEK	00652	00662 00663
C00236	ITET		
C00426	ITIME		
C00310	ITMAX	01356	01355
C00002	ITOUT		
C00000	ITP		
C00000	ITWON		
C00230	ITYPE		
C00374	ITYPET		
C00331	IVUL		
C11027	IVONTYP	01274	01274
C00326	I-TPP2		
P01574	-100001		
P01574	-100002	01474	
P01432	-100003		
P01633	-100004	01631	
P01651	-1443	01432	
P01661	-1444	01575	
P01604	-1447	01606	
P00640	-2004	01637	
P01244	-2006		
P00654	-402		
P00667	-404	00652	00453
P00672	-405	00637	
P00634	-400	00634	
P00772	-420		
P01036	-425		
P01174	-444	01243	
P01224	-450		
P01232	-451	01231	
P01244	-455	01231	
P01370	-460	01367	
P01654	-465	01367	
P01257	-480	01323	
P01316	-482	01415	
P01324	-483	01315	

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C00000	MAWGEZ			
C00047	MARMSIT			
C00167	MAJOR			
C00001	MALEMT			
C00002	MAS-TYP			
C00256	MAXFACTV			
C00255	MAXERACV			
C00004	MAXIND	01652	01652	
C00254	MAXKILL			
C00003	MRNDRY			
C00004	MCCREGN			
C00005	MCLASS			
C00006	MCNTHYS			
C00357	MCODE			
C00007	MCONR			
C00010	MCORTYP			
C00012	MDEPNLG			
C00011	MDPEN			
C00013	MGROUP			
P02003	MI	01200	01202	01210
C00253	MINKILL			
C00170	MINDR			
C10567	MIRV	01271	01272	
C01042	MIS			
C00223	MISDEF			
C00014	MAYLCO			
C00015	MPECOVR			
C00016	MRECVLG			
C00017	MREF			
C00020	MRTLEG			
C00021	MRTPT			
P02004	MSIDE	01256	01303	01322
C00022	MSPERMT			
C00023	MTANKRS			
C00024	MTANCLS			
C00025	MTANCOL			
C00026	MTARCPX			
C00027	MTARENS			
C00030	MTARGFT			
C00031	MTARIND			
C00046	MTANPCL			
C00032	MTARSFC			
C00033	MTARTFI			
C00034	MTARTYP			
C00035	MTARVAL			
C00036	MTELMCM			
C00037	MTOTRAS			
C00040	MTYPE			
C00217	MVA			
C00041	MVULN			
C00042	MWEAPGP			
C00047	MWDS			
C00043	MWDTPE			
C00000	MYOENT			

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C00044	WZOEPT								
C00045	WZOFES								
P02005	N	01743	00774	01253	01307	01317	01504	01507	01534
		01540	01545	01552	01557	01564	01571	01610	01612
C00332	WADULT								
C00333	WADHLE								
C00415	WAIAT								
C00405	WAL								
C00301	WALPTIHL								
C00303	WALHTILY								
C11577	WAMCLAS								
C00156	WAME								
C00335	WAMEHDEC								
C00262	WASMS								
C00001	WASMT	01067	01067						
C00003	WALHPLD	01252	01252						
C00002	WC								
C00263	WCA								
C00002	WCOL								
C00242	WNECOYS								
C00411	WNET								
C01042	WNEWIN								
C00211	WEXTZOF								
C00000	WJ								
C00000	WISL								
C00003	WITEA								
C00074	WLRW								
C00176	WMPSTE								
C00001	WN	01427	01430	01511	01511	01516	01523	01530	01535
C00177	WCALEFI	01561	01566	01573	01576	01577	01600	01601	01602
C00260	WROWH1								
C00261	WROWH2								
C00200	WRI-COM								
C00433	WOPFWSU1								
C00434	WOPFWSU2								
C00435	WOPFWSQ3								
C00175	WOPFWSQ4								
C00000	WOPFWSQ5								
C00001	WOUT								
C00001	WPEA								
C00005	WPEPLD								
C00356	WTRG								
C00000	WTOEF								
C00337	WTINT								
C01001	WTINTA								
C00000	WULL								
C00436	WUMHLE								
C00001	WV								
C00002	WVULN								
C00000	WVMP								
C00336	WVHOS								
C00355	WVPS								
C00345	WVTPF								

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C00001	NZONES	01161	01161
P01670	P00000.0	01677	
P01720	P00001.0	01727	
C00412	P00002.0		
C00264	PAYLOAD		
C00315	DOES		
C00266	POUD		
C00277	PER		
C00316	PERF		
C00314	PINC		
C00317	PKMS		
C00425	PKNAV		
C00311	PLANT		
C00352	PLACE		
C00353	PLACEN		
C00215	POP		
C00173	POSTURE		
C00313	PRART		
C00372	PRIMETAR		
C00427	PSAS		
X00002	PROTECT.	00000	00631
X00005	UNSHINGL.	01655	
C00220	RADIUS		
C00270	RANGE		
C00271	RANGEDEC		
C00272	RANGEREFE		
C00274	REF		
C00207	RESERVE		
C00151	STW		
C00155	STFEND		
C00275	SPDASH		
C00274	SPULO		
C00273	SPEED		
C00157	SPRIN		
C00004	STATUS		
X00004	STM.		
C00246	T1	01510	01515
C00247	T2	01612	01613
C00250	T3	01641	01655
C00404	TAIM	01102	01130
C00662	TACK	01577	01417
C00225	TAROFFHI		
C00226	TAROFFLO		
C00003	TAROMI	01552	
C00002	TARPLN	01553	
C00172	TASK	01564	
C00001	TCOL		
C00431	TGISTAT	00665	00670
X00001	THFEN.	01123	01133
		01414	01434

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01510	01527	01534	01541	01546	01553	01560	01565	01572
01612	01703	01734	01752	01777	01810	01843	01851	01874
01102	01166	01212	01233	01245	01260	01325	01337	01371
01577	01466	01476	01605	01630	01644			
01027	01027							
01552								
01553								
01564								
00644	00731	00737	00770	01002	01030	01046	01071	01077
01123	01171	01222	01236	01250	01311	01330	01360	01374
01414	01471	01501	01625	01641	01647			

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P01111	WS00011.	01122	01122
P01151	WS00012.	01146	
P01145	WS00013.	01162	01162
P01207	WS00014.	01227	01227
P01267	WS00015.	01310	01310
P01336	WS00016.	01365	01365
P01347	WS00017.	01357	01357
P01405	WS00020.	01413	
P01425	WS00021.	01433	
P01450	WS00022.	01457	
P01445	WS00023.	01462	
P01505	WS00024.	01651	
P01617	WS00025.	01624	
C00304	X		
C07644	Y		
C00257	YIELD		
C17504	Z		
C00010	Z04	01507	
C00202	Z05E		
C07470	Z04FS	01152	01152
00735 SYMBOLS			



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C
CEND
CUSE
      EQUIVLFNCE(IHORD,IT=0L0)
      I=ORD
      *****
      I START *****
      COMMON/1/ISL,N,NCOL,NITE,X(4000),Y(4000),Z(4000),IORD(4000)
      DIMENSION STATUS(12000)
      EQUIVLFNCE(STATUS,X)
      *****
      NISL = NUMBER OF COLLOCATED ISLANDS
      NN = INDEX TO COLAR
      NCOL = NUMBER OF COLLOCATED TARGETS
      NITEM = NUMBER OF ITEMS IN SEGMENT BEING PROCESSED.
      X,Y,Z = LONGITUDE, LATITUDE, CRITICAL DISTANCE
      IND = INDEX NUMBER OF X,Y,Z
      STATUS = PACKED DATA FOR TARGETS
      *****
      1 *****
      3 *****
      COMMON/3/ICUR,ISTORE,COLAR(100),COMPLEX(4000)
      TYPE INTEGER COLAR, COMPLEX
      DIMENSION CROUT(100),CVULN(100)
      TYPE INTEGER CVULN
      EQUIVLFNCE(CROUT,COMPLEX),(CVULN,COMPLEX(101))
      *****
      3 *****
      4 *****
      COMMON/4/MUL,CUMNO(15),HYPES(15),INDCLAS(15),
      IINDREG(250),TYPEHAW(40,15),TYPEHBL(40,15),
      2INDCUR(250),DOY(40,7),
      3 TANK(40,5),ASMT(20,2),WH0(50,3),ZONES(75,3),
      4CAPACTY(50,2),ICHA(250),MIRV(40,2),
      5IWHNTYP(40,2),INWPRS(50,2),INNECYS(40,2),INARDEC(40,2),
      6,NANCLAF(15)
      DIMENSION FMIS(40,11),MIS(40,11)
      DIMENSION NEWIYD(4000)
      EQUIVLFNCE(NEWIYD,MIS,FMIS,TYPEHAW(251))
      TYPE INTEGER TYPEHAW,TYPEHBL,CUMNO,HYPES
      DIMENSION IHUM(40,7),ITANK(40,5)
      EQUIVLFNCE(IHUM,ROM),(ITANK,TANK)
      *****
      4 *****
      5 *****
      COMMON/5/NIREF,IYERM(512),NTINIX(512)
      *****
      5 *****
      COMMON /MYLABEL/ MYFORM,MYSECR,MYLENGTH,MYCOMM(5)
      *****
      COMMON/PROCESS/NI,NV,NC,INTIME(100),VALUE(500),DEF(500),LGLOR(500)
      CODECLAREX
      TYPE INTEGER VALUE
      TYPE LOGICAL DEF,LGLOR
      COMMON/EDITIEN/IS-ITERM
      COMMON/EDITAPE/INTP,NOUT,ITOUT(10),JOUT
      EQUIVLFNCE(CLASS,VALUE(1))
      TYPE INTEGER CLASS
      EQUIVLFNCE(ITYPE,VALUE(2))

```

TYPE INTEGER TYPE	*VALUE(3))
EQUIVALENCE(SIDE	
TYPE INTEGER SIDE	*VALUE(4))
EQUIVALENCE(CNTRYOWN,*VALUE(
TYPE INTEGER CNTRYOWN	*VALUE(5))
EQUIVALENCE(CNTRYLOC,*VALUE(
TYPE INTEGER CNTRYLOC	*VALUE(6))
EQUIVALENCE(FUNCTION,*VALUE(
TYPE INTEGER FUNCTION	*VALUE(7))
EQUIVALENCE(SITENO,*VALUE(
TYPE INTEGER SITENO	*VALUE(8))
EQUIVALENCE(NAME	
TYPE INTEGER NAME	*VALUE(9))
EQUIVALENCE(SUNNO	
TYPE INTEGER SUNNO	*VALUE(10))
EQUIVALENCE(FLTNO	
TYPE INTEGER FLTNO	*VALUE(11))
EQUIVALENCE(MENO	
TYPE INTEGER MENO	*VALUE(12))
EQUIVALENCE(VOLN	
TYPE INTEGER VOLN	*VALUE(13))
EQUIVALENCE(H)	
TYPE INTEGER H1	*VALUE(14))
EQUIVALENCE(M2	
TYPE INTEGER M2	*VALUE(15))
EQUIVALENCE(MACNO	
TYPE INTEGER MACNO	*VALUE(16))
EQUIVALENCE(CATCODE	
TYPE INTEGER CATCODE	*VALUE(17))
EQUIVALENCE(MAJON	
TYPE INTEGER MAJON	*VALUE(18))
EQUIVALENCE(MINOR	
TYPE INTEGER MINOR	*VALUE(19))
EQUIVALENCE(DESIG	
TYPE INTEGER DESIG	*VALUE(20))
EQUIVALENCE(TASK	
TYPE INTEGER TASK	*VALUE(21))
EQUIVALENCE(POSTURE	
TYPE INTEGER POSTURE	*VALUE(22))
EQUIVALENCE(CIMEXNO	
TYPE INTEGER CIMEXNO	*VALUE(23))
EQUIVALENCE(MPERSON,*VALUE(
TYPE INTEGER MPERSON	*VALUE(24))
EQUIVALENCE(MPSITE	
TYPE INTEGER MPSITE	*VALUE(25))
EQUIVALENCE(MOLECT	
TYPE INTEGER MOLECT	*VALUE(26))
EQUIVALENCE(MOINCOM	
TYPE INTEGER MOINCOM	*VALUE(27))
EQUIVALENCE(LINK	
TYPE INTEGER LINK	*VALUE(28))
EQUIVALENCE(ZONE	
TYPE INTEGER ZONE	*VALUE(29))
EQUIVALENCE(CAPPA	
TYPE REAL CAPPA	*VALUE(30))
EQUIVALENCE(REST	

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TYPE REAL L-T
EQUIVALENCE(LONG) *VALUE(31)
TYPE REAL LONG
EQUIVALENCE(LONG) *VALUE(32)
TYPE INTEGER LONG
EQUIVALENCE(LONG) *VALUE(33)
TYPE INTEGER RESERVE
EQUIVALENCE(LONG) *VALUE(34)
TYPE INTEGER -LONG
EQUIVALENCE(LONG) *VALUE(35)
TYPE INTEGER NEXT/ONE
EQUIVALENCE(LONG) *VALUE(36)
TYPE INTEGER POINT
EQUIVALENCE(LONG) *VALUE(37)
TYPE REAL CATIN
EQUIVALENCE(CATEGORY) *VALUE(38)
TYPE REAL CATEGORY
EQUIVALENCE(CATEGORY) *VALUE(39)
TYPE REAL PID
EQUIVALENCE(PID) *VALUE(40)
TYPE INTEGER IN
EQUIVALENCE(IN) *VALUE(41)
TYPE INTEGER DATA
EQUIVALENCE(DATA) *VALUE(42)
TYPE REAL MADIUS
EQUIVALENCE(RADIUS) *VALUE(43)
TYPE REAL VAL
EQUIVALENCE(VAL) *VALUE(44)
TYPE REAL VALU
EQUIVALENCE(VALU) *VALUE(45)
TYPE INTEGER MISOFF
EQUIVALENCE(MISOFF) *VALUE(46)
TYPE INTEGER INOFF
EQUIVALENCE(INOFF) *VALUE(47)
TYPE INTEGER TARGETMI
EQUIVALENCE(TARGETMI) *VALUE(48)
TYPE INTEGER TARGETFO
EQUIVALENCE(TARGETFO) *VALUE(49)
TYPE INTEGER ICLASS
EQUIVALENCE(ICLASS) *VALUE(50)
TYPE INTEGER ITYPE
EQUIVALENCE(ITYPE) *VALUE(51)
TYPE INTEGER IIMG
EQUIVALENCE(IIMG) *VALUE(52)
TYPE INTEGER INEPUFL
EQUIVALENCE(INEPUFL) *VALUE(53)
TYPE INTEGER IOTHER
EQUIVALENCE(IOTHER) *VALUE(54)
TYPE INTEGER IGROUP
EQUIVALENCE(IGROUP) *VALUE(55)
TYPE INTEGER ICOMPLEX
EQUIVALENCE(ICOMPLEX) *VALUE(56)
TYPE INTEGER ITGT
EQUIVALENCE(ITGT) *VALUE(57)
TYPE INTEGER JTYPE
EQUIVALENCE(JTYPE) *VALUE(58)

TYPE INTEGER *DTYPE
 EQUIVALENCE (AS-TYPE, *VALUE(59))
 TYPE INTEGER AS-TYPE
 EQUIVALENCE (INFCOYS, *VALUE(60))
 TYPE INTEGER INFCOYS
 EQUIVALENCE (FFAC, *VALUE(61))
 TYPE REAL FFAC
 EQUIVALENCE (DELTA, *VALUE(62))
 TYPE REAL DELTA
 EQUIVALENCE (FVALM), *VALUE(63))
 TYPE REAL FVALM
 EQUIVALENCE (F1, *VALUE(64))
 TYPE REAL F1
 EQUIVALENCE (F2, *VALUE(65))
 TYPE REAL F2
 EQUIVALENCE (F3, *VALUE(66))
 TYPE REAL F3
 EQUIVALENCE (FVALT1, *VALUE(67))
 TYPE REAL FVALT1
 EQUIVALENCE (FVALT2, *VALUE(68))
 TYPE REAL FVALT2
 EQUIVALENCE (MIN-KILL, *VALUE(69))
 TYPE REAL MIN-KILL
 EQUIVALENCE (MAX-KILL, *VALUE(70))
 TYPE REAL MAX-KILL
 EQUIVALENCE (MAX-PPACV, *VALUE(71))
 TYPE REAL MAX-PPACV
 EQUIVALENCE (MAX-FACTV, *VALUE(72))
 TYPE REAL MAX-FACTV
 EQUIVALENCE (YIELD, *VALUE(73))
 TYPE REAL YIELD
 EQUIVALENCE (IND-CHM1, *VALUE(74))
 TYPE INTEGER IND-CHM1
 EQUIVALENCE (IND-CHM2, *VALUE(75))
 TYPE INTEGER IND-CHM2
 EQUIVALENCE (N-MSMS, *VALUE(76))
 TYPE INTEGER N-MSMS
 EQUIVALENCE (INC1, *VALUE(77))
 TYPE INTEGER INC1
 EQUIVALENCE (PAYLOAD, *VALUE(78))
 TYPE INTEGER PAYLOAD
 EQUIVALENCE (TIMEP, *VALUE(79))
 TYPE INTEGER TIMEP
 EQUIVALENCE (IMD, *VALUE(80))
 TYPE REAL IMD
 EQUIVALENCE (ICEP, *VALUE(81))
 TYPE REAL ICEP
 EQUIVALENCE (M-AGE, *VALUE(82))
 TYPE REAL M-AGE
 EQUIVALENCE (M-AGE-DEC, *VALUE(83))
 TYPE REAL M-AGE-DEC
 EQUIVALENCE (M-AGE-REF, *VALUE(84))
 TYPE REAL M-AGE-REF
 EQUIVALENCE (SPEED, *VALUE(85))
 TYPE REAL SPEED
 EQUIVALENCE (SPD, *VALUE(86))

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TYPE REAL SPOLQ
 EQUIVALENCE (SPDASH, *VALUE (87))
 TYPE REAL SPUASH
 EQUIVALENCE (HEL, *VALUE (88))
 TYPE REAL HEL
 EQUIVALENCE (PEN, *VALUE (89))
 TYPE REAL PEN
 EQUIVALENCE (ALERTDHL, *VALUE (90))
 TYPE REAL ALERTDHL
 EQUIVALENCE (INALRTDHL, *VALUE (91))
 TYPE REAL NALMTOHL
 EQUIVALENCE (ALERTDLY, *VALUE (92))
 TYPE REAL ALERTDLY
 EQUIVALENCE (INALRTDLY, *VALUE (93))
 TYPE REAL NALRTDLY
 EQUIVALENCE (CCREL, *VALUE (94))
 TYPE REAL CCREL
 EQUIVALENCE (TTOS, *VALUE (95))
 TYPE REAL TTOS
 EQUIVALENCE (TMDEL, *VALUE (96))
 TYPE REAL TMDEL
 EQUIVALENCE (TVDEL, *VALUE (97))
 TYPE REAL TVDEL
 EQUIVALENCE (THEYARG, *VALUE (98))
 TYPE REAL THEYARG
 EQUIVALENCE (PLANT, *VALUE (99))
 TYPE REAL PLANT
 EQUIVALENCE (ABHATE, *VALUE (100))
 TYPE REAL ABHATE
 EQUIVALENCE (PKHAT, *VALUE (101))
 TYPE REAL PKHAT
 EQUIVALENCE (PINC, *VALUE (102))
 TYPE REAL PINC
 EQUIVALENCE (PNDES, *VALUE (103))
 TYPE REAL PNDES
 EQUIVALENCE (PPFP, *VALUE (104))
 TYPE REAL PPFP
 EQUIVALENCE (PKHIS, *VALUE (105))
 TYPE REAL PKHIS
 EQUIVALENCE (ATTRLEG, *VALUE (106))
 TYPE REAL ATTRLEG
 EQUIVALENCE (ATTRCORR, *VALUE (107))
 TYPE REAL ATTRCORR
 EQUIVALENCE (PKHSTYLE, *VALUE (108))
 TYPE INTEGER KKHSTYLE
 EQUIVALENCE (UEFRANGE, *VALUE (109))
 TYPE REAL UEFRANGE
 EQUIVALENCE (HILOATTR, *VALUE (110))
 TYPE REAL HILOATTR
 EQUIVALENCE (ATTRSUPP, *VALUE (111))
 TYPE REAL ATTRSUPP
 EQUIVALENCE (INTYP2, *VALUE (112))
 TYPE INTEGER INTYP2
 EQUIVALENCE (EFFECTNES, *VALUE (113))
 TYPE REAL EFFECTNES
 EQUIVALENCE (ISTYE, *VALUE (114))

TYPE INTEGER AGY
 EQUIVALENCE (UGX, *VALUE(143))
 TYPE INTEGER DGX
 EQUIVALENCE (UGY, *VALUE(144))
 TYPE INTEGER DGY
 EQUIVALENCE (AHO8, *VALUE(145))
 TYPE INTEGER AHOB
 EQUIVALENCE (DMOB, *VALUE(146))
 TYPE INTEGER DMOB
 EQUIVALENCE (MMOB, *VALUE(147))
 TYPE INTEGER PMOB
 EQUIVALENCE (PRIMEIAR, *VALUE(148))
 TYPE INTEGER PRIMEIAR
 EQUIVALENCE (ICLASST, *VALUE(149))
 TYPE INTEGER ICLASST
 EQUIVALENCE (ITYPET, *VALUE(150))
 TYPE INTEGER IITYPET
 EQUIVALENCE (JIYPET, *VALUE(151))
 TYPE INTEGER JIYPET
 EQUIVALENCE (ITYPET, *VALUE(152))
 TYPE INTEGER IITYPET
 EQUIVALENCE (ICLASST, *VALUE(153))
 TYPE INTEGER ICLASST
 EQUIVALENCE (CATYOWNT, *VALUE(154))
 TYPE INTEGER CATYOWNT
 EQUIVALENCE (CATYLOCT, *VALUE(155))
 TYPE INTEGER CATYLOCT
 EQUIVALENCE (IPENMOB, *VALUE(156))
 TYPE INTEGER IPENMOB
 EQUIVALENCE (IPESMOB, *VALUE(157))
 TYPE INTEGER IPESMOB
 EQUIVALENCE (IATTACK, *VALUE(158))
 TYPE INTEGER IATTACK
 EQUIVALENCE (VAL, *VALUE(159))
 TYPE INTEGER VAL
 EQUIVALENCE (IATP, *VALUE(160))
 TYPE INTEGER IATP
 EQUIVALENCE (IOWNS, *VALUE(161))
 TYPE INTEGER IOWNS
 EQUIVALENCE (IPEN, *VALUE(162))
 TYPE INTEGER IPEN
 EQUIVALENCE (ICRT, *VALUE(163))
 TYPE INTEGER ICRT
 EQUIVALENCE (IPARTIVE, *VALUE(164))
 TYPE INTEGER IPARTIVE
 EQUIVALENCE (IADEFZON, *VALUE(165))
 TYPE INTEGER IADEFZON
 EQUIVALENCE (ADEFZON, *VALUE(166))
 TYPE INTEGER ADEFZON
 EQUIVALENCE (MAINT, *VALUE(167))
 TYPE INTEGER MAINT
 EQUIVALENCE (AZON1, *VALUE(168))
 TYPE INTEGER AZON1
 EQUIVALENCE (AZON2, *VALUE(169))
 TYPE INTEGER AZON2
 EQUIVALENCE (AZON3, *VALUE(170))

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```

TYPE INTEGER AZON3          *VALUE( 171)
EQUIVALENCE(CPACTY,
TYPE INTEGER CPACTY        *VALUE( 172))
EQUIVALENCE(ICARR,
TYPE INTEGER ICARR         *VALUE( 173))
EQUIVALENCE(CTRY,
TYPE INTEGER CTRY          *VALUE( 174))
EQUIVALENCE(INCL,
TYPE INTEGER INCL          *VALUE( 175))
EQUIVALENCE(OPPAY,
TYPE REAL OPNAV           *VALUE( 176))
EQUIVALENCE(PNNAV,
TYPE INTEGER ITIME        *VALUE( 177))
EQUIVALENCE(PNASH,
TYPE REAL PNASW          *VALUE( 178))
EQUIVALENCE(PNASW,
TYPE REAL PNASW          *VALUE( 179))
EQUIVALENCE(TATSTAT,
TYPE INTEGER TATSTAT      *VALUE( 180))
EQUIVALENCE(FLAG,
TYPE INTEGER FLAG         *VALUE( 181))
EQUIVALENCE(MIDERSO1,
TYPE INTEGER MIDERSO1     *VALUE( 182))
EQUIVALENCE(MIDERSO2,
TYPE INTEGER MIDERSO2     *VALUE( 183))
EQUIVALENCE(MIDERSO3,
TYPE INTEGER MIDERSO3     *VALUE( 184))
EQUIVALENCE(MIDERSO4,
TYPE INTEGER MIDERSO4     *VALUE( 185))
EQUIVALENCE(MIDERSO5,
TYPE REAL EFFNES1        *VALUE( 186))
EQUIVALENCE(MIDERSO6,
TYPE REAL EFFNES2        *VALUE( 187))
EQUIVALENCE(MIDERSO7,
TYPE REAL VAL1           *VALUE( 188))
EQUIVALENCE(MIDERSO8,
TYPE REAL VAL2           *VALUE( 189))
EQUIVALENCE(MIDERSO9,
TYPE INTEGER TYPE1        *VALUE( 190))
EQUIVALENCE(MIDERSO10,
TYPE INTEGER TYPE2        *VALUE( 191))
GO TO(1,2,3,4,5,6,7,8,9,10) AND
INITIALIZE SLIPPER AND PU FIRST SLIPPER
1 CONTINUE
TYPE
MIDERSO1 = MIDERSO1
MIDERSO2 = MIDERSO2
CALL SETSLIP
MIDERSO1 = MIDERSO1
CALL MIDERSO1(MIDERSO1, MIDERSO2)
CALL MIDERSO1(MIDERSO1, MIDERSO2)
CALL MIDERSO1(MIDERSO1, MIDERSO2)
CALL MIDERSO1(MIDERSO1, MIDERSO2)
CALL MIDERSO1(MIDERSO1, MIDERSO2)
CALL MIDERSO1(MIDERSO1, MIDERSO2)

```

19000
20000
21000
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29000
30000
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32000
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34000
35000

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```

C      RETURN
      WRITE(CMULN
2      ITP = 4
      ITWOPIENVULN
      CALL WORD
      CALL WARRAY(CMULN,NVULN)
      RETURN
C      WRITE(COLSP
3      CONTINUE
      ITP=4
      ITOPD=CCL
      CALL WORD
      CALL WARRAY(COLSP,NCOL)
      RETURN
C      FINISH
4      CONTINUE
      ITDES
      ITOPD = AIDEF
      CALL WORD
      CALL WARRAY(COITX,NTIFF)
914      CONTINUE
C      FINISH Simulator Input Table
      ITP=4
      ITOPD = WARMFZ * WARMFIT
      CALL WORD
      CALL WARRAY(AINT,ITOPD)
      ITOPD = WARMFZ
      CALL WORD
      CALL WARRAY(PIRP,WARMDF7)
      ITOPD = WARMFZ
      CALL WORD
      CALL WARRAY(IVERLP,WARMDF7)
      ITOPD=WARMFZ
      CALL WORD
      CALL WARRAY(STATUS,MAXIND)
      MCUMNO(1)
      M = NUMBER MISSILES
C      ITOPD=V
      CALL WORD
      DO 391 I = 1, 11
      CALL WARRAY(MTS(I,I),V)
391      CONTINUE
      MCUMNO(2)=M
      M = NUMBER BOMBERS
C      ITOPD=V
      CALL WORD
      DO 392 I = 1, 7
      CALL WARRAY(NOM(I,I),V)
392      CONTINUE
      MCUMNO(3)=CUMNO(2)
      M = NUMBER TANKERS
C      ITOPD=V
      CALL WORD
      DO 393 I = 1, 5
      CALL WARRAY(TANK(I,I),V)
393      CONTINUE

```

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```

IT*ORD=ASMT
CALL *R*ORD
CALL *HARRY(ASMT(1,1),*ASMT)
CALL *HARRY(ASMT(1,2),*ASMT)
IT*ORD=*H*
CALL *H*ORD
CALL *HARRY(*H*ORD(1,1),*H*ORD)
CALL *HARRY(*H*ORD(1,2),*H*ORD)
CALL *HARRY(*H*ORD(1,3),*H*ORD)
IT*ORD=*N*ZONES
CALL *H*ORD=*N*
DO 394 I=1,3
CALL *HARRY(ZONES(1,1),*N*ZONES)
394 CONTINUE
DO 395 I=1,2
*H*ORD(1,3)=*H*ORD(1,2)
IT*ORD=*N*
CALL *H*ORD
CALL *HARRY(CAPACTY(1,1),*N*)
395 CONTINUE
IT*ORD=*N*H*UPL*
CALL *H*ORD=*N*H*UPL*
NP=IT*ORD
CALL *HARRY(*H*UPL*(1,1),*H*UPL*,NP)
CALL *HARRY(*H*UPL*(1,2),*H*UPL*,NP)
CALL *HARRY(*H*UPL*(1,3),*H*UPL*,NP)
CALL *HARRY(*H*UPL*(1,4),*H*UPL*,NP)
CALL *HARRY(*H*UPL*(1,5),*H*UPL*,NP)
GO TO (397,398) ISIDE
397 ISIDE=2
IT*ORD=*H*ED*PL*
GO TO 396
398 CONTINUE
IT*ORD=*H*UPL* * IT*MAX
CALL *H*ORD
NAV=IT*ORD
CALL *HARRY(*H*UPL*,NAV)
CALL *HARRY(*H*UPL*,NAV)
CALL *H*ORD
RETURN
5 CONTINUE
6 CONTINUE
7 CONTINUE
8 CONTINUE
9 CONTINUE
10 CONTINUE
*H*ORD
END

```

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RSMT

C00312 ANRATE
 C00334 ANRLT
 C00340 ANRL4
 C00414 ANFFCWP
 C00413 ANFFZON
 C00363 AGX
 C00364 AGY
 C00367 AHOL
 C00000 AINT
 C00300 ALEHTOHL
 C00302 ALEHTOLY
 C00203 APEA
 C07172 ASAT
 C00241 ASATYPE
 C00321 ATTMCORW
 C00320 ATTWLEF
 C00325 ATTHSUPF
 C00416 A70N1
 C00417 A70N2
 C00420 A70N3
 P00464 HCFE
 C00161 HENG
 C00210 HLEHNO
 C00602 HON
 C00820 HYPES
 C10031 CAPACTY
 C00164 CATCOPE
 C00304 CCHL
 C00267 CFP
 C00147 CLASS
 C00377 CLASSI
 C00153 CMTYVLOC
 C00152 CMTYVOCN
 C00401 CMTYVOCI
 C00400 CMTYVONI
 C00360 CODE
 C00002 COLAR
 C00146 COMPLFX
 C00421 CPACTY
 C00146 CPRTST
 C00001 CPMWQ
 C00312 CVULN
 C00213 DATEITA
 C00214 DATEOUT
 C00144 DELASW
 C00133 DEF
 C00323 DEFRAAGE
 C00343 DELAY
 C00244 DELTA
 C00171 DESIG
 C00365 HIX
 C00366 HIGY
 C00370 HMO

00127

00245 00250

00500 00504 00514

00207 00212

00052 00317 00322

00104

00047

00072

00407

00311

00310

00217

00210

00214

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C00437 EFFECES1
C00440 EFFECES2
C00327 EFFECTES
P00501 EATING
C00350 EATIT
C00351 EYEATN
P00000 EXIT
C00243 EXHAC
C00432 FLAG
C00100 FLTAG
C01042 FMIC
P00003 FOMAT
P00011 FOMMOL
C00154 FUNCTION
C00245 EVALMI
C00251 EVALTI
C00252 EVALT2
P00515 GETPL
P00505 GETPL
C00163 HJ
C00164 H2
C00324 MILCATT
P00522 T

C00344 LALFHT
C00354 TALT
C00224 LADDEF
C00404 LATTACK
C05602 LEOW
C00002 LEWEAK
C10175 LCHK
C00227 LCLASS
C00373 LCLASSST
C00235 LCOMPLEX
C00422 LCOMPS
C00000 LCOM
C00424 LCHL
C00311 LCHLMAX
C00362 LCHL
C00000 IFIPDET
C00216 LCHT
P00523 LCHTO
C00234 LCHTOP
C00423 LCHTV
P00417 LCHT001
P00420 LCHT002
P00421 LCHT003
P00422 LCHT005
P00423 LCHT006

00007 00032 00030 00113 00115 00170 00264 00271 00353 00357
00101 00163 00164 00261 00357
00010 00061 00073 00105 00415 00416 00464 00465 00466
00504
00025 00027 00074 00477
00471 00474 00511
00163 00172 00200 00213 00225 00234 00273 00302 00307 00323
00437

00040 00043 00046 00051 00054 00057 00067 00071
00124 00126 00133 00135 00142 00144 00151
00211 00223 00232 00242 00247 00254
00300 00315 00321 00333 00341 00346 00352
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P00425	INOCGIO.	00354	00457						
C11457	IP14REC	00361	00364						
C27344	INI.								
C00056	IMP4EG	00041							
C00037	IMPCLAS	00055							
C05210	IMMOUR								
C11337	IMPECYS	00354	00360						
C00174	INDXNO								
C00346	INDV								
C00003	INITEM								
P00464	INITIAL	00010							
C00347	INTAC								
C00000	INTP								
C11173	INMMHS	00350	00353						
C00233	IOTHEE								
C00120	IOVEKLP	00145							
C00402	IPFAWODE								
C00212	IPPOINT								
C00000	IPONT								
C00403	IPECANDE								
C00232	IRFFUEL								
C00231	IREG								
C00265	IRFO								
P00524	ISINF	00326	00365	00371	00453				
C00330	ISITE								
C00001	ISTODF								
C00000	ISNTERH								
C00662	ITANK								
C00001	ITFDH								
C00236	ITGT								
C00426	ITIME								
C00310	ITMAX	00377							
C00002	ITOUT								
C00000	ITP	00023	00024	00062	00063	00074	00075	00109	00120
C00000	ITXOFN	00034	00034	00064	00065	00076	00077	00110	00122
		00131	00131	00140	00140	00147	00147	00157	00177
		00221	00240	00240	00252	00252	00267	00267	00331
		00334	00334	00374	00374	00377	00400	00403	00431
C00230	ITYPE								
C00374	ITYPET								
C00331	IVULN								
C11027	IWNTYP	00343	00347						
C00326	IWTYPP								
P00023	.1	00013							
P00416	.10	00022							
P00062	.2	00014							
P00074	.3	00015							
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P00213	.392								
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P00416	.5	00016
P00416	.6	00017
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P00416	.8	00020
P00416	.9	00021
P00117	.916	
P00003	..100000	00025
P00004	..100001	00027
P00171	.200001	00166
P00212	.200002	00207
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C00014	JOINT	
C00237	JTYPE	
C00375	JTYPE1	
C00322	KORSTYLE	
C00204	LAT	
C00206	LEGNO	
C01153	LGLOP	
C00201	LINK	
C00000	LMAX	00044
C00205	LONG	00041 00044
P00525	M	
C00000	MARMDFZ	00156 00171 00176 00177 00212 00220 00233 00312 00322
C00047	MABWST	00120 00121 00130 00137 00145
C00167	MAJOR	
C00001	MAFRT	
C00002	MASHTYP	
C00256	MAXFACTV	
C00255	MAXFRACV	
C00004	MAXIND	00146 00146 00154
C00254	MAXKILL	
C00003	MENDRY	
C00004	MCCREGN	
C00005	MCLASS	
C00006	MCTRYS	
C00357	MCOHE	
C00037	MCCORR	
C00010	MCORTYP	
C00012	MREFNLG	
C00011	MOPEN	
C00013	MGROUP	
C00253	MINKILL	
C00170	MINDR	
C10567	MIRV	00336 00342

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C00223	MISREF			
C00014	MPAYLND			
C00015	MRECOVR			
C00016	MRECVLG			
C00017	MREF			
C00020	MRTLEG			
C00021	MRTT			
C00022	MSPERMT			
C00023	MSPRKS	00047	00052	00055 00060
C00024	MSPRCLS			
C00025	MSPRCL			
C00026	MSPRCPX			
C00027	MSPRERS			
C00030	MTARGET			
C00031	MTARIND			
C00046	MTARECL			
C00032	MTARSEC			
C00033	MTARTEI			
C00034	MTARTYP			
C00035	MTARVAL			
C00036	MTELMCM			
C00037	MTOTRAS			
C00040	MTYPE			
C00217	MVA			
C00041	MVULN			
C00042	MWEARGP			
C00047	MWHOS			
C00043	MWOTPE			
C00003	MYCOMM			
C00006	MYFORM	00026	00026	
C00000	MYIDENT	00030	00030	
C00002	MYLENGTH			
C00001	MYSECR			
C00044	MZONEPT			
C00045	MZONES			
C00332	NADRLI			
C00333	NADRLR			
C00415	NAINT			
C00405	NAL			
C00301	NALRDRL			
C00303	NALPTOLY			
C11577	NAMCLAS	00060		
C00156	NAME			
C00335	NAREDEC			
C00262	NASMS			
C00001	NASMT	00237	00237	00245 00250
P00326	NAV	00404	00407	00412
C00003	NRLUPLD	00330	00330	
C00002	NC			
C00263	NCM			
C00002	NCOL	00075	00076	00104
C00242	NDEC0YS			
C00411	NOET			

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C01042	NEWIND
C00211	MEXIZONE
C00000	NI
C00000	NISL
C00003	NITM
C00074	NLRF
C00176	NWDSITE
C00001	NW
C00177	NOALET
C00260	NOHOWM1
C00261	NOHOWM2
C00200	NOINCOM
C00003	NOIP
C00433	NOIPERSQ1
C00434	NOIPERSQ2
C00435	NOIPERSQ3
C00175	NOPELUSQ1
C00000	NOPIINT
C00001	NOPIUT
C00057	NOPI
C00410	NOPEA
C00005	NOPELDD
C00356	NOFARG
C00000	NOIDEF
C00037	NOINTX
C00101	NOINTX
C00000	NOILL
C00436	NOIMDL
C00001	NV
C00002	NOVLA
C00000	NOVMO
C00336	NOVUS
C00355	NWAPS
C00345	NWAPF
C00001	NZDACS
C00042	NZ3000AU
C00412	PASIVE
C00264	PAYLOAD
C00315	PDES
C00426	PDUU
C00477	PFC
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C00316	PFFT
C00316	PINC
C00317	PKNV
C00025	PKNAV
C00311	PLANT
C00352	PLACE
C00353	PLACEA
C00016	POP
C00473	POSTUSE
C00313	PPART
C00372	PPARTAR
C00427	PSACS

00136

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00373 00373

90107 00116 00116

00714

000053	00064	00072	00262	00265
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00108	00107	00109	00236	00248	00260	00268	00282
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00110	00109	00111	00238	00250	00262	00270	00284
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00117	00116	00118	00245	00257	00269	00277	00291
00118	00117	00119	00246	00258	00270	00278	00292
00119	00118	00120	00247	00259	00271	00279	00293
00120	00119	00121	00248	00260	00272	00280	00294
00121	00120	00122	00249	00261	00273	00281	00295
00122	00121	00123	00250	00262	00274	00282	00296
00123	00122	00124	00251	00263	00275	00283	00297
00124	00123	00125	00252	00264	00276	00284	00298
00125	00124	00126	00253	00265	00277	00285	00299
00126	00125	00127	00254	00266	00278	00286	00300
00127	00126	00128	00255	00267	00279	00287	00301
00128	00127	00129	00256	00268	00280	00288	00302
00129	00128	00130	00257	00269	00281	00289	00303
00130	00129	00131	00258	00270	00282	00290	00304
00131	00130	00132	00259	00271	00283	00291	00305
00132	00131	00133	00260	00272	00284	00292	00306
00133	00132	00134	00261	00273	00285	00293	00307
00134	00133	00135	00262	00274	00286	00294	00308
00135	00134	00136	00263	00275	00287	00295	00309
00136	00135	00137	00264	00276	00288	00296	00310
00137	00136	00138	00265	00277	00289	00297	00311
00138	00137	00139	00266	00278	00290	00298	00312
00139	00138	00140	00267	00279	00291	00299	00313
00140	00139	00141	00268	00280	00292	00300	00314
00141	00140	00142	00269	00281	00293	00301	00315
00142	00141	00143	00270	00282	00294	00302	00316
00143	00142	00144	00271	00283	00295	00303	00317
00144	00143	00145	00272	00284	00296	00304	00318
00145	00144	00146	00273	00285	00297	00305	00319
00146	00145	00147	00274	00286	00298	00306	00320
00147	00146	00148	00275	00287	00299	00307	00321
00148	00147	00149	00276	00288	00300	00308	00322
00149	00148	00150	00277	00289	00301	00309	00323
00150	00149	00151	00278	00290	00302	00310	00324
00151	00150	00152	00279	00291	00303	00311	00325
00152	00151	00153	00280	00292	00304	00312	00326
00153	00152	00154	00281	00293	00305	00313	00327
00154	00153	00155	00282	00294	00306	00314	00328
00155	00154	00156	00283	00295	00307	00315	00329
00156	00155	00157	00284	00296	00308	00316	00330
00157	00156	00158	00285	00297	00309	00317	00331
00158	00157	00159	00286	00298	00310	00318	00332
00159	00158	00160	00287	00299	00311	00319	00333
00160	00159	00161	00288	00300	00312	00320	00334
00161	00160	00162	00289	00301	00313	00321	00335
00162	00161	00163	00290	00302	00314	00322	00336
00163	00162	00164	00291	00303	00315	00323	00337
00164	00163	00165	00292	00304	00316	00324	00338
00165	00164	00166	00293	00305	00317	00325	00339
00166	00165	00167	00294	00306	00318	00326	00340
00167	00166	00168	00295	00307	00319	00327	00341
00168	00167	00169	00296	00308	00320	00328	00342
00169	00168	00170	00297	00309	00321	00329	00343
00170	00169	00171	00298	00310	00322	00330	00344
00171	00170	00172	00299	00311	00323	00331	00345
00172	00171	00173	00300	00312	00324	00332	00346
00173	00172	00174	00301	00313	00325	00333	00347
00174	00173	00175	00302	00314	00326	00334	00348
00175	00174	00176	00303	00315	00327	00335	00349
00176	00175	00177	00304	00316	00328	00336	00350
00177	00176	00178	00305	00317	00329	00337	00351
00178	00177	00179	00306	00318	00330	00338	00352
00179	00178	00180	00307	00319	00331	00339	00353
00180	00179	00181	00308	00320	00332	00340	00354
00181	00180	00182	00309	00321	00333	00341	00355
00182	00181	00183	00310	00322	00334	00342	00356
00183	00182	00184	00311	00323	00335	00343	00357
00184	00183	00185	00312	00324	00336	00344	00358
00185	00184	00186	00313	00325	00337	00345	00359
00186	00185	00187	00314	00326	00338	00346	00360
00187	00186	00188	00315	00327	00339	00347	00361
00188	00187	00189	00316	00328	00340	00348	00362
00189	00188	00190	00317	00329	00341	00349	00363
00190	00189	00191	00318	00330	00342	00350	00364
00191	00190	00192	00319	00331	00343	00351	00365
00192	00191	00193	00320	00332	00344	00352	00366
00193	00192	00194	00321	00333	00345	00353	00367
00194	00193	00195	00322	00334	00346	00354	00368
00195	00194	00196	00323	00335	00347	00355	00369
00196	00195	00197	00324	00336	00348	00356	00370
00197	00196	00198	00325	00337	00349	00357	00371
00198	00197	00199	00326	00338	00350	00358	00372
00199	00198	00200	00327	00339	00351	00359	00373
00200	00199	00201	00328	00340	00352	00360	00374
00201	00200	00202	00329	00341	00353	00361	00375
00202	00201	00203	00330	00342	00354	00362	00376
00203	00202	00204	00331	00343	00355	00363	00377
00204	00203	00205	00332	00344	00356	00364	00378
00205	00204	00206	00333	00345	00357	00365	00379
00206	00205	00207	00334	00346	00358	00366	00380
00207	00206	00208	00335	00347	00359	00367	00381
00208	00207	00209	00336	00348	00360	00368	00382
00209	00208	00210	00337	00349	00361	00369	00383
00210	00209	00211	00338	00350	00362	00370	00384
00211	00210	00212	00339	00351	00363	00371	00385
00212	00211	00213	00340	00352	00364	00372	00386
00213	00212	00214	00341	00353	00365	00373	00387
00214	00213	00215	00342	00354	00366	00374	00388
00215	00214	00216	00343	00355	00367	00375	00389
00216	00215	00217	00344	00356	00368	00376	00390
00217	00216	00218	00345	00357	00369	00377	00391
00218	00217	00219	00346	00358	00370	00378	00392
00219	00218	00220	00347	00359	00371	00379	00393
00220	00219	00221	00348	00360	00372	00380	00394
00221	00220	00222	00349	00361	00373	00381	00395
00222	00221	00223	00350	00362	00374	00382	00396
00223	00222	00224	00351	00363	00375	00383	00397
00224	00223	00225	00352	00364	00376	00384	00398
00225	00224	00226	00353	00365	00377	00385	00399
00226	00225	00227	00354	00366	00378	00386	00400
00227	00226	00228	00355	00367	00379	00387	00401
00228	00227	00229	00356	00368	00380	00388	00402
00229	00228	00230	00357	00369	00381	00389	00403
00230	00229	00231	00358	00370	00382	00390	00404
00231	00230	00232	00359	00371	00383	00391	00405
00232	00231	00233	00360	00372	00384	00392	00406
00233	00232	00234	00361	00373	00385	00393	00407
00234	00233	00235	00362	00374	00386	00394	00408
00235	00234	00236	00363	00375	00387	00395	00409
00236	00235	00237	00364	00376	00388	00396	00410
00237	00236	00238	00365	00377	00389	00397	00411
00238	00237	00239	00366	00378	00390	00398	00412
00239	00238	00240	00367	00379	00391	00399	00413
00240	00239	00241	00368	00380	00392	00400	00414
00241	00240	00242	00369	00381	00393	00401	00415
00242	00241	00243	00370	00382	00394	00402	00416
00243	00242	00244	00371	00383	00395	00403	00417
00244	00243	00245	00372	00384	00396	00404	00418
00245	00244	00246					


```

181 CONTINUE
MYIDEAT = 8401CKOB
CALL INITEDIT(1)
CALL INPITEM
ICLAS=ITL(5HCLASS,ATTNAME,IDEF)
ITYPE=ITL(4HTYPE,ATTNAME,IDEF)
ISICE=ITL(4HSICE,ATTNAME,IDEF)
16 IF(IVALUE(15:UE) .EQ. ISIDEP) 161,1455
3456 IF(IVALUE(15:IE) .EQ. ISIDEP1) 8184,161
161 INDCLAS=ITL(IVALUE(ICLAS),NAMECLAS,NUMCLAS)
    IF(INDCLAS .EQ. 0) 3,2
    3 IF(NUMCLAS .EQ. NCLASEXP) 8185,8186
8185 PRINT 8187,NCLASEXP,VALUE(ICLAS)
8187 FORMAT(10H MORE THAN 15,8H CLASSES,5X,A8,2X,7HMISSING)
GC TO 8184
8186 NUMCLAS=NUMCLAS+1
NAMECLAS(NUMCLAS)=VALUE(ICLAS)
INDCLAS=NUMCLAS
2 NTRYTYPE=NUMTYPE
NTRY=1
69 INDTYPE=ITL(IVALUE(ITYPE),NAMETYPE(1:OY),NTRYTYPE)
    IF(INDTYPE .EQ. 0) 5,57
    5 IF(NUMTYPE .EQ. NTYPEXP) 8182,8181
8182 PRINT 8183,NTYPEXP,VALUE(ITYPE)
8183 FOR=ATT(10H MORE THAN 15,6H TYPES,5X,A8,2X,7HMISSING)
GC TO 8184
67 INDTYPE=ITRY,INDTYPE-1
66 IF(INDCLAS .EQ. SLASTYPE(INDTYPE)) 6,68
68 NTRYTYPE=NUMTYPE-INDTYPE
NTRY=INDTYPE+1
    IF(1TRY .GT. NUMTYPE) 5,69
8181 NUMTYPE=NUMTYPE+1
NAMETYPE(NUMTYPE)=VALUE(ITYPE)
INDTYPE=NUMTYPE
CLASTYPE(INDTYPE)=INDCLAS
COUNT TOTAL ITEMS OF EACH CLASS
6 MVALATT(NATTEXP,INDTYPE)=MVALATT(NATTEXP,INDTYPE)+1
C FIND CLASS ATTRIBUTES
DO 7 I=1,IDEF
    7 IF(DEF(I)) 8,7
    8 ICCODESM=ICCODE(I)
MVAL=VALUE(I)
ISURS=NATTEXP*(INDCLAS-1)+1
INDATT=ITL(ATTNAME(I),NMATT(SUBS),NUMATT(INDCLAS))
    IF(INDATT .EQ. 0) 9,10
    9 IF(NUMATT(INDCLAS) .EQ. NATTEX) 8191,8192
8191 PRINT 8193,NATTEX,NAMECLAS(INDCLAS),ATTNAME(I)
8193 FORMAT(10H MORE THAN 15,2H ATTRIBUTES FOR CLASS A8,2X,A8,2X,7HMISS
ING)
GC TO 7
8192 NUMATT(INDCLAS)=NUMATT(INDCLAS)+1
INDATT=NUMATT(INDCLAS)
NAMEATT(INDATT,INDCLAS,1)=ATTNAME(I)
NAMEATT(INDATT,INDCLAS,2)=I
13 GC TO (130,130),1,131,132,131,130),ICODESM
130 VALATT(INDATT,1,INDTYPE)=VAL+VALATT(INDATT,INDTYPE)

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FTNS.5

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GC TC 7
131 MVALATT(INDATT,INDTYPE)=MVAL
GC TC 7
132 MVALATT(INDATT,INDTYPE)=MVAL
GC TC 7
10 IF(ITEMS(INDATT,INDTYPE)) 141,140
141 GC TC (120,130,7,7,1,20),ICODES#
140 IF(MVALATT(NATTEXP,INDTYPE).EQ.1) 13,14
14 IF(MVALATT(INDATT,INDTYPE).EQ.VALUE(I)) 7,15
15 ITEMS(INDATT,INDTYPE)=1
GC TC (151,151,7,7,151),ICODES#
151 VALATT(INDATT,INDTYPE)=VALATT(INDATT,INDTYPE)*MVALATT(NATTEXP,
INDTYPE)-1
GC TC 130
7 CONTINUE
R184 CONTINUE
CALL NEXTITEM
GC TC (16,17),IS#TERM
17 DO 18 I=1,NUMTYPE
NA=NUMATT(CLASTYPE(I))
DO 18 J=1,NA
IF(ITEMS(J,I)) 19,18
19 NAME=AMEATT(J,CLASTYPE(I),2)
ICODES=ICODE(NM)
GC TC (20,20,18,18,18,20),ICODES#
20 VALATT(J,I)=VALATT(J,I)/MVALATT(NATTEXP,I)
18 CONTINUE
PRINT OUT
CALL PAGESKP
NDC=NATTEXP+1
DO 39 K=1,NUMCLAS
K=NUMATT(K)
NCOUNT=
DO 41 I=1,NDC
DO 41 J=1,IC
DO 41 L=1,2
41 PARAY(I,J,L)=C
DO 34 I=1,NUMTYPE
IF(CLASTYPE(I).EQ.K) 30,34
30 IF(NCOUNT.EQ.8) 37,31
31 NCOUNT=NCOUNT+1
PARAY(I,NCOUNT,I)=NAMEATYPE(I)
PARAY(I,NCOUNT,I)=MVALATT(NATTEXP,I)
DO 36 J=1,NA
PARAY(J,2,NCOUNT,I)=MVALATT(J,I)
IF(ITEMS(J,I)) 22,23
32 PARAY(J,2,NCOUNT,2)=1H*
GC TC 36
33 PARAY(J,2,NCOUNT,2)=1H
36 CONTINUE
GC TC 34
27 ASSIGN 38 TC NSACK
GC TC 100
38 NCOUNT=0
DO 42 IX=1,NDC
DO 42 JX=1,10

```

```

00 42 LX=1,2
42 PARRAY(IX,JX,LX)=0
50 TC 31
34 CONTINUE
ASSIGN 39 TO NBACK
60 TC 100
39 CONTINUE
IF(IISIDEP.EQ. 3*RED) 162,163
162 CONTINUE
1466 = 1
IEND = NTYPE
00 1045 I = 1, 2
CALL PARESKP
PRINT 1004, IPRSIDE(I)
1006 FORMAT(0 SUMMARY OF VALUES IN TARGET CLASSES FOR SIDE **48/** PLA
155 TYPE AVERAGE VALUE NO. OF ITEMS TOTAL VALUE*)
TVAL = 0.
ISAVCL = 0
DO 1007 J = IRE6, IEND
IF (ISAVCL - IPRCLAS(J)) 1004, 1009, 1004
NEW CLASS NAME
1004 PRINT 1008, IPRCLAS(J)
1008 FORMAT(10,48)
ISAVCL = IPRCLAS(J)
C OLD CLASS
1009 NVAL = IPRVAL(J)
V-L = VAL * IPRITEM(J)
TVAL = TVAL + VAL
PRINT 1010, IPRITEM(J), IPRVAL(J), IPRITEM(J), VAL
1010 FORMAT(11,48,48,48,48,2,38,18,38,14,2)
1007 CONTINUE
PRINT 1011, IPRSIDE(I), TVAL
1011 FORMAT(// GRAND VALUE TOTAL FOR SIDE **48** IS *,F14,2)
1466 = NTYPE + 1
IEND = NTCIPH
1005 CONTINUE
STOP
143 ISIPED=3HRED
ISIEDE=4HBLUE
NTYPE = NTCIPH
GO TO 164
100 IF (NCOUNT.EQ. C) 104,105
105 PRINT 101, NAMECLAS(K)
WRITE(*,2)
PRINT 102, (PARRAY(1,L,1),L=1,NCOUNT)
PRINT 103, (PARRAY(2,L,1),L=1,NCOUNT)
00 104 L=1,NV
WRITE(*,103)=FORMAT(NAMEATT(L-2,K,2))
PRINT 1000, NAMEATT(L-2,K,1), (PARRAY(L,M,1),PARRAY(L,M,2),M=1,NC
COUNT)
IF (NAMEATT(L-2,K,1).EQ. 3HVAL) 1003,106
1003 00 1002 IPUACH=1,NCOUNT
NTCIPH = NTCIPH + 1
IPRCLAS(NTCIPH) = NAMECLAS(K)
IPRVAL(NTCIPH) = PARRAY(1,IPUACH,1)
IPRVAL(NTCIPH) = PARRAY(2,IPUACH,1)

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FTN5.5

```
      IPRITEM(NTCTPR) = PARRAY(2,IPUNCH,1)
1002 CONTINUE
106 CONTINUE
      PRINT 107
104 GO TO NRACK
107 FORMAT(//////)
101 FORMAT(15X,5HCLASS,5X,A8//)
102 FORMAT(10X,8(3X,A5,2X))
103 FORMAT(2X,5HITEM,5,3X,8(3X,18,2X))
      END
```

5.4TS BASESUM

ED 0

PROGRAM LENGTH
ENTRY POINTS
BLOCK NAMES

BASESUM

IDENT

BASESUM	03451
DIRECTRY	01671
PROCESS	11654
EDITERM	01173
TABLES	20001
MYIDENT	66703
NOIDENT	20001
NOPRINT	00001

EXTERNAL SYMBOLS

ORIENTRY
03010440
THEND.
03000c40
01005100
01004100
0805100
0805100
0805100
ALCCDIR
INITAPE
INITEDIT
INPIEM
ITL
NEXTITEM
PAGESKP
STH.
ONSINGL.

MS357B 51705

[illegible]

5.4.15 BASESUM

.ED 0

P03115	I*OC025.	02554	03217	03227	03231	03243	03245	03257		
P03116	I*OC027.	02747	02770	03177	03214					
P03117	I*OC030.	03005	03036	03161	03173	03175	03211			
P03120	I*OC031.	03024	03175	03210	03261	03273				
P03121	I*OC033.	03047	03276	03311						
P03122	I*OC034.	03047	03176	03212	03275	03310				
P03407	I*OAIT	02213	02240	03325						
P03410	I*ODCLAS	02071	02067	02130	02152	02174	02202	02213	02225	03315
P03411	I*OTYPE	02104	02125	02126	02131	02135	02136	02150	02152	03356
X00012	I*ITAPE	01730								
X00013	I*ITEDIT	01777								
X00003	I*ITEM									
X00014	I*ITEM	02002								
P00017	I*PRCLAS	02532	02641	02645	03055					
P01147	I*PRIFER	02652	02663	03063						
P00015	I*PSIDE	01677	01707	02620	02677					
P00327	I*PTYP	02661	03057							
P00637	I*PRVAL	02647	02662	03061						
P03412	I*PUNCH	03043	03304							
P03413	I*SAVCL	02625	02637	02645						
P03414	I*SIDE	02622	02023	02027						
P03415	I*SIDEP	01677	02025	02602	02716					
P03416	I*SIDEPI	01700	02031	02717						
P03417	I*OURS	02177	02200							
C00000	I*WTERM	02345	02345							
C61552	I*ITEMS	01764	02273	02317	02371	02524				
X00015	I*TLF	02104	02011	02016	02035	02100	02204			
P03420	I*TRY	02073	02076	02124	02137	02137				
P03421	I*TYPE	02045	02074	02117	02144					
P03422	I*	02543	02567	03224						
P01765	.1									
P02270	.10	02212								
P02722	.100	02537	02575							
P03064	.1002									
P03042	.1003									
P02634	.1004	02633								
P02707	.1005									
P02667	.1007									
P02446	.1009	02633								
P03100	.104	02724								
P02725	.105	02723								
P03066	.104	03441								
P02250	.13	02304								
P02256	.131	02252								
P02262	.131	02253	02252	02274	02276	02302	02336			
P02265	.132	02255	02254	02255						
P02303	.140	02273								
P02307	.14	02305								
P02274	.141	02273								
P03314	.15	02313								
P02326	.151	02322	02322							
P02023	.16	02347								
P02033	.161	02026	02032							
P02604	.162									

5.415 BASESUM

EO 0

P02715 .162	02603						
P01732 .164	02721						
P02750 .17							
P02421 .18	02372	02412	02413	02414	02414		
P01771 .181							
P02373 .19	02372						
P02415 .20	02411						
P02071 .2	02043						
P02044 .3							
P02476 .30							
P02501 .31	02477	02567					
P02526 .32	02525						
P02531 .33	02525						
P02570 .34	02475	02535					
P02027 .3456	02026						
P02533 .36	02533						
P02536 .37	02500						
P02540 .38	02536						
P02576 .39	02574						
P01742 .4							
P02455 .41							
P02555 .42							
P02107 .5	02141						
P02154 .6	02133						
P02130 .66							
P02124 .67	02104						
P02134 .68	02132						
P02074 .69	02141						
P02137 .7	02165	02261	02264	02267	02277	02301	02323
	02323	02324					
	02166						
P02167 .8	02116						
P02142 .8181							
P02111 .8182							
P02343 .8184	02060	02123					
P02045 .8185							
P02061 .8186	02045						
P02217 .8191							
P02235 .8192	02216						
P02213 .9							
P03367 .FASER.	02175	02176	02334	02374	02375	02400	02401
P01460 .1C0000	01676						
P01461 .1C0001	01700						
P01462 .1C0002	01704						
P01463 .1C0003	01704						
P01464 .1C0004	01710						
P01465 .1C0005	01712						
P01466 .1C0006	01724						
P01467 .1C0007	01775						
P01470 .1C0008	02004						
P01471 .1C0009	02013						
P01472 .1C0010	02020						
P01545 .1C0011	02526						
P01546 .1C0012	02531						
P01547 .1C0013	02602						

5.4.7.5 BASESUM

ED 0

C00651	NPATT	02201	02206	02440	02515	02736			
P03441	NN	02361	02364						
C00000	NCPRINT	01722	01723						
P00003	NPARR								
P03442	NTCTPR	01703	02706	02720	03051	03052	03054		
P03443	NTRYTYPE	02072	02135	02135	02115				
P03444	NTRYEXP	01715	01773	02110	02720				
P03445	NTYPE	01702	02605	02704	02207				
C12461	NUMATT	01742	01743	02202					
		02437	02437						
P03446	NUMCLAS	01733	02040	02044	02061	02062	02065	02214	02236
P03447	NUMTYPE	01734	02071	02107	02134	02140	02142	02150	02237
C00001	NV								
P03123	P00000.U	03127							
P03142	P00001.U	03146							
P03161	P00002.U	03164							
P03175	P00003.U	03202							
P03217	P00004.U	03221							
P03231	P00005.U	03234							
P03245	P00006.U	03250							
P03261	P00007.U	03264							
P03275	P00010.U	03301							
X00017	PAGF SKP	02427							
C62733	PARRAY	02455	02456	02506	02507	02511	02522	02532	02532
		02556	02750	02771	02771	02771	03025	03055	03057
		03060	03061	03062					
X00006	Q1QC*100	02651							
X00005	Q1Q05100	02416							
X00004	Q3Q00040	02164				02370	02523		
X00002	Q3Q10040	01763	02271						
X00010	Q8Q01CT	00000	02316						
X00001	Q8Q0ENTRY	01674	01672						
X00007	Q8Q0STOPS	02713							
X00021	Q8Q0SINGL	03103							
X00020	STM	02047	02112	02220	02614	02635	02656	02674	02726
		03073							
		02050							
X00003	THEND	03076	02121	02232	02621	02642	02665	02702	02734
		01740							
P01745	TS00001	01750							
P01773	TS00002	01757							
P01766	TS00003	02162							
P02341	TS00004	02353							
P02425	TS00005	02395							
P02423	TS00006	02435							
P02600	TS00007	02445							
P02445	TS00010	02461							
P02572	TS00013	02516							
P02535	TS00014	02545							
P02565	TS00015	02630							
P02671	TS00021	02146							
P02754	TS00022	02167							
P02775	TS00023	03004							
P03070	TS00024	03023							
P03032	TS00025								

DISTRIBUTION

Addresssee		Copies
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B122 (stock)	6
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B210	2
B220	18
B230	1
B300	1
DCA Codes		
2e0 (original document only, no subsequent changes)	1
920	.....	1
950	.....	1
OJCS		
Studies, Analysis and Gaming Agency, ATTN: SFD, Room 1D957, Pentagon, Washington, D. C. 20301	.....	5
Commander-in-Chief, North American Air Defense Command, ATTN: NPPG, Ent Air Force Base, Colorado 80912	.....	2
Commander, U. S. Air Force Weapon Laboratory (AFSC), ATTN: AWL, Kirtland Air Force Base, New Mexico 87117	.....	2
Director, Strategic Target Planning Offutt Air Force Base, Nebraska 68113	.....	2
Chief of Naval Operations, ATTN: OP963G Room 5E531, Pentagon, Washington, D.C. 20350	.....	2
Defense Documentation Center, Cameron Station, Alexandria, Virginia 22314	.....	12
		<u>60</u>